

Appendix G

Cost Estimate



INTEROFFICE MEMORANDUM

Date: March 28, 2002

To: D. J. Wagoner MS 3950 6-9989

From: R. D. Roseland *RDR* MS 3655 6-0316

Subject: CFA-08 STP DRAINFIELD COVER

Estimating Services has prepared the attached Title II/AFC Cost Estimate for the CFA-08 Sewage Treatment Plant (STP) Drainfield Cover Project. The Total Estimated Cost (TEC) for this project is \$1,399,108. Of this, \$1,279,215 is for construction subcontractor costs (excluding training costs). The estimate is based on Title II/AFC design drawings and specifications, special conditions, conversations with the requester and design personnel, and assumptions outlined in the attachments. This project was estimated using factors established in Block 8 of the Nine-Block Matrix. Any changes to the scope of work could have a significant impact on the cost estimate and should be reviewed by Estimating Services. Estimating Services specifically reserves its right to revise this estimate after the pre-bid meeting due to clarifications that may arise, the issuance of addenda, etc.

Attached for your review are the TEC Summary Report, Project Summary Report, Cost Estimate Support Data Recapitulation, Construction Detail Item Report, and Contractor Distribution Report.

If you have any questions or comments, please do not hesitate to contact me at 526-0316 or e-mail ID ROSERD.

RDR

Attachments

cc: J. L. Leavitt, MS 5312
S. W. Sherick, MS 3940
Estimate File 3321-A *John Sherick*
R. D. Roseland Letter File (RDR-09-02)

Uniform File Code: 8309

Disposition Authority: A16-1.4-a


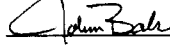
Retention Schedule: Cut off at the end of each fiscal year. Destroy when 10 years old.

NOTE: Original disposition authority, retention schedule, and Uniform Filing Code applied by the sender may not be appropriate for all recipients. Make adjustments as needed.

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Project Number: **3321-A**

TEC Summary Report

<u>ESTIMATE ELEMENT</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>TOTAL</u>
Total Estimated Cost (TEC)	\$1,396,928	0.16% \$2,180	0.00% \$0	\$1,399,108
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Total Estimated Cost (TEC)	\$1,396,928	0.16% \$2,180	0.00% \$0	\$1,399,108
Rounded TEC (Rounded to the nearest \$ 1)				\$1,399,108

Type of Estimate: <u>Title III/AFC</u> Estimator: <u>R. D. Roseland</u> Checked By: <u></u> Approved By: <u></u>	Remarks
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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

Project Summary Report

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>		<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
9000	CONSTRUCTION	\$1,328,266	\$2,180	\$0	0.00%	\$1,330,446
9100	--CONSTRUCTION SUBCONTRACTS	\$1,277,231	\$1,984	\$0	0.00%	\$1,279,215
9101	----GENERAL CONDITIONS	\$145,162	\$304	\$0	0.00%	\$145,466
9101.1	-----GENERAL CONDITIONS - GENERAL SUBCONTRACTOR	\$115,885	\$0	\$0	0.00%	\$115,885
9101.1.01	-----MOBILIZATION & DEMOBILIZATION - GENERAL SUBCONTRACTOR	\$19,036	\$0	\$0	0.00%	\$19,036
9101.1.01.1	-----MOBILIZATION - GENERAL SUBCONTRACTOR	\$10,708	\$0	\$0	0.00%	\$10,708
9101.1.01.2	-----DEMOBILIZATION - GENERAL SUBCONTRACTOR	\$8,328	\$0	\$0	0.00%	\$8,328
9101.1.02	-----SUPERVISION & FACILITIES - GENERAL SUBCONTRACTOR	\$86,230	\$0	\$0	0.00%	\$86,230
9101.1.03	-----EQUIPMENT DECONTAMINATION - GENERAL SUBCONTRACTOR	\$10,620	\$0	\$0	0.00%	\$10,620
9101.2	-----GENERAL CONDITIONS - FENCING SUBCONTRACTOR	\$9,828	\$0	\$0	0.00%	\$9,828
9101.2.01	-----MOBILIZATION & DEMOBILIZATION - FENCING SUBCONTRACTOR	\$3,253	\$0	\$0	0.00%	\$3,253
9101.2.01.1	-----MOBILIZATION - FENCING SUBCONTRACTOR	\$1,627	\$0	\$0	0.00%	\$1,627
9101.2.01.2	-----DEMOBILIZATION - FENCING SUBCONTRACTOR	\$1,627	\$0	\$0	0.00%	\$1,627
9101.2.02	-----SUPERVISION - FENCING SUBCONTRACTOR	\$6,177	\$0	\$0	0.00%	\$6,177
9101.2.03	-----DECONTAMINATE EQUIP. - FENCING SUBCONTRACTOR	\$398	\$0	\$0	0.00%	\$398
9101.3	-----GENERAL CONDITIONS - LANDSCAPING SUBCONTRACTOR	\$14,487	\$304	\$0	0.00%	\$14,791
9101.3.01	-----MOBILIZATION & DEMOBILIZATION - LANDSCAPING SUBCONTRACTOR	\$8,310	\$175	\$0	0.00%	\$8,485
9101.3.01.1	-----MOBILIZATION - LANDSCAPING SUBCONTRACTOR	\$5,114	\$107	\$0	0.00%	\$5,221
9101.3.01.2	-----DEMOBILIZATION - LANDSCAPING SUBCONTRACTOR	\$3,196	\$67	\$0	0.00%	\$3,263
9101.3.02	-----SUPERVISION - LANDSCAPING SUBCONTRACTOR	\$6,177	\$130	\$0	0.00%	\$6,306
9101.4	-----GENERAL CONDITIONS - ELECTRICAL SUBCONTRACTOR	\$4,961	\$0	\$0	0.00%	\$4,961
9101.4.01	-----MOBILIZATION & DEMOBILIZATION - ELECTRICAL SUBCONTRACTOR	\$2,375	\$0	\$0	0.00%	\$2,375

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

Project Summary Report

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
9101.4.01.1 -----MOBILIZATION - ELECTRICAL SUBCONTRACTOR	\$1,319	\$0	\$0	0.00%	\$1,319
9101.4.01.2 -----DEMOBILIZATION - ELECTRICAL SUBCONTRACTOR	\$1,056	\$0	\$0	0.00%	\$1,056
9101.4.02 -----SUPERVISION - ELECTRICAL SUBCONTRACTOR	\$2,586	\$0	\$0	0.00%	\$2,586
9102 -----SITEWORK	\$1,122,885	\$1,680	\$0	0.00%	\$1,124,565
9102.1 -----MOW VEGETATION	\$1,779	\$0	\$0	0.00%	\$1,779
9102.2 -----DEMOLITION	\$4,601	\$0	\$0	0.00%	\$4,601
9102.2.01 -----DEMO DISTRIBUTION BOXES	\$2,119	\$0	\$0	0.00%	\$2,119
9102.2.02 -----DEMO RAD. CONTROL FENCE	\$2,483	\$0	\$0	0.00%	\$2,483
9102.3 -----EARTHWORK	\$1,036,522	\$0	\$0	0.00%	\$1,036,522
9102.3.01 -----BACKFILL - LAYER 4 (PIT RUN GRAVEL FROM CFA PIT)	\$73,620	\$0	\$0	0.00%	\$73,620
9102.3.01.1 -----TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT	\$29,014	\$0	\$0	0.00%	\$29,014
9102.3.01.2 -----PLACE LAYER 4 - PIT RUN GRAVEL	\$44,606	\$0	\$0	0.00%	\$44,606
9102.3.02 -----BACKFILL - LAYER 3 (IMPORTED COBBLES)	\$297,718	\$0	\$0	0.00%	\$297,718
9102.3.02.1 -----TRANSPORT LAYER 3 - COBBLES FROM I.F.	\$252,423	\$0	\$0	0.00%	\$252,423
9102.3.02.2 -----PLACE LAYER 3 - COBBLES	\$45,295	\$0	\$0	0.00%	\$45,295
9102.3.03 -----BACKFILL - LAYER 2 (IMPORTED PEA GRAVEL)	\$107,118	\$0	\$0	0.00%	\$107,118
9102.3.03.1 -----TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.	\$88,645	\$0	\$0	0.00%	\$88,645
9102.3.03.2 -----PLACE LAYER 2 - PEA GRAVEL	\$18,473	\$0	\$0	0.00%	\$18,473
9102.3.04 -----BACKFILL - PERIMETER LAYER (CLAY LOAM FROM SPREADING AREA A)	\$167,748	\$0	\$0	0.00%	\$167,748
9102.3.04.1 -----TRANSPORT CLAY LOAM FROM SPREADING AREA A	\$104,190	\$0	\$0	0.00%	\$104,190
9102.3.04.2 -----PLACE PERIMETER LAYER - CLAY LOAM FROM SPREADING AREA A	\$63,558	\$0	\$0	0.00%	\$63,558
9102.3.05 -----BACKFILL - LAYER 1 (SILT LOAM FROM LINCOLN BLVD. PIT)	\$366,171	\$0	\$0	0.00%	\$366,171

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

Project Summary Report

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>		<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
9102.3.05.1	-----TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD	\$237,128	\$0	\$0	0.00%	\$237,128
9102.3.05.2	-----PLACE LAYER 1 - SILT LOAM FROM LINCOLN BLVD. PIT	\$129,043	\$0	\$0	0.00%	\$129,043
9102.3.06	-----INITIAL & FINAL SURVEYING & CALCULATIONS	\$5,525	\$0	\$0	0.00%	\$5,525
9102.3.06.1	-----SURVEY BORROW PITS BEFORE MATERIAL REMOVAL	\$1,579	\$0	\$0	0.00%	\$1,579
9102.3.06.2	-----SURVEY BORROW PITS AFTER RE-GRADING	\$2,368	\$0	\$0	0.00%	\$2,368
9102.3.06.3	-----SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION	\$1,579	\$0	\$0	0.00%	\$1,579
9102.3.07	-----PLACE PIT RUN GRAVEL IN DISTRIBUTION BOXES	\$1,000	\$0	\$0	0.00%	\$1,000
9102.3.08	-----PROOF ROLL DRAINFIELD	\$1,958	\$0	\$0	0.00%	\$1,958
9102.3.09	-----GRADE & RESHAPE CFA PIT	\$989	\$0	\$0	0.00%	\$989
9102.3.10	-----GRADE & RESHAPE SPREADING AREA A	\$2,966	\$0	\$0	0.00%	\$2,966
9102.3.11	-----GRADE & RESHAPE LINCOLN BLVD. PIT	\$2,966	\$0	\$0	0.00%	\$2,966
9102.3.12	-----BUILD RAMP AT SPREADING AREA A	\$8,744	\$0	\$0	0.00%	\$8,744
9102.4	-----INSTALL NEW PERIMETER FENCE	\$45,483	\$955	\$0	0.00%	\$46,439
9102.5	-----REVEGETATION	\$34,500	\$725	\$0	0.00%	\$35,225
9102.5.01	-----PREPARE & SEED DRAINFIELD COVER	\$8,447	\$177	\$0	0.00%	\$8,625
9102.5.02	-----PLACE GFE WOOD CHIP MULCH AT DRAINFIELD COVER	\$15,292	\$321	\$0	0.00%	\$15,613
9102.5.03	-----PREPARE & SEED SPREADING AREA A	\$5,399	\$113	\$0	0.00%	\$5,513
9102.5.04	-----PREPARE & SEED LINCOLN BLVD. PIT	\$5,362	\$113	\$0	0.00%	\$5,474
9116	----ELECTRICAL	\$9,184	\$0	\$0	0.00%	\$9,184
9116.1	-----INSTALL NEW FENCE GROUNDING	\$9,184	\$0	\$0	0.00%	\$9,184
9200	--IN-HOUSE WORK	\$32,312	\$196	\$0	0.00%	\$32,508
9202	----SITEWORK	\$22,963	\$0	\$0	0.00%	\$22,963

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

Project Summary Report

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
9202.1 -----DEMO/DISPOSE OF TELEPHONE POLES & RAILROAD TIES	\$634	\$0	\$0	0.00%	\$634
9202.2 ----- DEMO PERIMETER FENCE & CUT OFF POSTS	\$18,521	\$0	\$0	0.00%	\$18,521
9202.3 -----CUT OFF WELL CASINGS & SEAL WITH BENTONITE	\$3,809	\$0	\$0	0.00%	\$3,809
9210 -----SPECIALTIES	\$9,349	\$196	\$0	0.00%	\$9,545
9210.1 -----INSTALL CONCRETE MONUMENTS	\$8,874	\$186	\$0	0.00%	\$9,060
9210.2 -----INSTALL INSTITUTIONAL CONTROLS SIGNS	\$475	\$10	\$0	0.00%	\$485
9300 --CONSTRUCTION SUPPORT	\$18,723	\$0	\$0	0.00%	\$18,723
9300.1 ----TRAINING	\$18,723	\$0	\$0	0.00%	\$18,723
GAPIF BBWI PF AND G&A	\$68,662	\$0	\$0	0.00%	\$68,662
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Total TEC (TOTAL ESTIMATED COST)	\$1,396,928	\$2,180	\$0	0.00%	\$1,399,108

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COST ESTIMATE SUPPORT DATA RECAPITULATION


Project Title: CFA-08 STP DRAINFIELD COVER

Estimator: R. D. Roseland

Date: March 28, 2002

Estimate Type: Title II/AFC

File: 3321-A

Approved By: 

I. **SCOPE OF WORK:** *Brief description of the proposed project.*

The project includes construction of a gravel and soil cap with perimeter fencing for the Central Facilities Area (CFA) – 08 Sewage Treatment Plant Drainfield. The drainfield is approximately 1,000 feet long by 200 feet wide. The soil cap consists of layers of pit run gravel, cobble rock, pea gravel, and native soil. The cap will be revegetated with perennial grasses and mulched with wood chips.

II. **BASIS OF THE ESTIMATE:** *Drawings, Design Report, Engineers Notes and/or other documentation upon which the estimate is originated.*

Title II/AFC drawings and specifications received on March 20, 2002, e-mailed directives/clarifications received from the requester and the project task coordinator on February 27, 2002, special conditions (Rev. 0) received on March 28, 2002, conversations with the requester and design personnel, and the previous project support estimate (Project File 3321).

III. **ASSUMPTIONS:** *Conditions statements accepted or supposed true without proof of demonstration. An assumption has a direct impact on total estimated cost.*

- A. Borrow sources for the pit run gravel and native soil layers are as indicated on the cost estimating detail sheets. This material is available at no cost to the subcontractor.
- B. Pea gravel and cobble rock will be imported and hauled from the Idaho Falls area to the project site.
- C. The majority of the project work will be awarded to a local subcontractor through the competitive bidding process. Costs for this work have been identified under the "construction subcontracts" category in the estimate. Costs for a small portion of the work (perimeter fence removal and well abandonment) indicated on the drawings to be performed "by others" (INEEL labor) have been included under the "in-house work" category of the estimate per direction received from the requester. Also included in this category are costs for removing railroad ties and for installing concrete monuments and institutional controls signs that are not indicated on the drawings or described in the specifications.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: CFA-08 STP DRAINFIELD COVER

File: 3321-A

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- D. Training costs for subcontractor personnel have been included in the estimate per direction received from the requester. Current construction management practice provides for reimbursement to the subcontractor for training costs incurred.
- E. All construction activities will be performed on a 4-10 work schedule.
- F. The project will commence during FY 2002 and be completed during early FY 2003. Escalation has been included in the estimate for the FY 2003 permanent fencing and revegetation work.
- G. This project will not require construction personnel to have security clearances above building access only (BAO).
- H. No allowance has been included for overtime and premium labor rates.
- I. All earthwork compaction tests will be performed by BBWI personnel.
- J. No rock drilling or rock excavation will be required.
- K. Per direction received from the requester, the inner radiological control fence is to be removed by the subcontractor (vs. "by others" as indicated on drawing C-1).
- L. No allowance has been included for construction complications resulting from weather conditions.
- M. No funds have been included in the estimate for installing filter fabric between the layers of cobble and pea gravel to keep the materials from blending.
- N. Earthwork and revegetation quantities in the estimate for the drainfield area coincide with those indicated on the design drawings. Any variations between the estimated and actual quantities will affect costs.
- O. Wood chip mulch is to be supplied to the subcontractor at no cost. The subcontractor will be allowed access for loading the stockpiled material at the CFA landfill.
- P. Radiological control support will be provided at no cost to the subcontractor.
- Q. There is a conflict between the specifications and general provisions regarding responsibility for equipment decontamination work. Per discussions with the construction coordinator and the task coordinator on March 28, 2002, BBWI radiological control personnel will perform the majority of the actual equipment decontamination/cleaning work at no cost to the subcontractor. As such, minimal subcontractor costs have been included in the estimate for this work.
- R. Activity specific assumptions have been included within the estimate body (reference cost estimating detail sheets) that are considered to also reflect the basis of this estimate.

IV. **CONTINGENCY GUIDELINE IMPLEMENTATION:** *The percentage used for contingency as determined by the contingency allowance guidelines can be altered to reflect the type of construction and conditions that may impact the total estimated cost.*

No contingency allowance has been included in this Title II/AFC estimate.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: CFA-08 STP DRAINFIELD COVER

File: 3321-A

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V. OTHER COMMENTS/CONCERNS SPECIFIC TO THE ESTIMATE

- A. Subcontractor labor costs reflect INEEL Site Jurisdictional Agreement craft labor rates.
- B. Costs for General and Administrative (G&A) allowance and procurement fees have been included in the estimate per direction received from the requester.
- C. Markup percentages utilized for overhead, profit, bond, and sub-tier handling fees are as indicated on the attached "contractor distribution report."
- D. Construction activities are anticipated to take 22 weeks based upon 10-hour shifts, 4 days per week. This consists of 15 weeks for demolition and earthwork activities and 7 weeks for fencing and revegetation work. Depending on when the project begins, there may be a period between the fencing and revegetation work when no construction work will occur.

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>	<u>Org/Subcontractor</u>	<u>QTY</u>	<u>Hrs</u>	<u>Crew/Rate</u>	<u>Labor</u>	<u>Const Eqp</u>	<u>Matl</u>	<u>S/C</u>	<u>Other</u>	<u>TOTAL</u>
--- 9101.1.01.1 MOBILIZATION - GENERAL SUBCONTRACTOR										
	GEN	U.C. per LOT			0	0	0	9000	0	9000
	Mobilization - General Subcontractor	1.00	0		\$0	\$0	\$0	\$9,000	\$0	\$9,000
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	Subtotal				\$0	\$0	\$0	\$9,000	\$0	\$9,000
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$0	\$0	\$0	\$1,708	\$0	\$1,708
<hr/>										
	Subtotal Estimate									\$10,708
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
--- Total	9101.1.01.1 MOBILIZATION - GENERAL SUBCONTRACTOR		0		\$0	\$0	\$0	\$10,708	\$0	\$10,708
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--- 9101.1.01.2 DEMOBILIZATION - GENERAL SUBCONTRACTOR										
	GEN	U.C. per LOT			0	0	0	7000	0	7000
	Demobilization - General Subcontractor	1.00	0		\$0	\$0	\$0	\$7,000	\$0	\$7,000
<hr/>										
	Subtotal				\$0	\$0	\$0	\$7,000	\$0	\$7,000
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$0	\$0	\$0	\$1,328	\$0	\$1,328
<hr/>										
	Subtotal Estimate									\$8,328
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
--- Total	9101.1.01.2 DEMOBILIZATION - GENERAL SUBCONTRACTOR		0		\$0	\$0	\$0	\$8,328	\$0	\$8,328
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--- 9101.1.02 SUPERVISION & FACILITIES - GENERAL SUBCONTRACTOR										
	GEN	U.C. per WK			1600	360	0	0	0	1960
	Supervisor & Pickup Truck - General Subcontractor	22.00	880	CN-SUPR \$40.00	\$35,200	\$7,920	\$0	\$0	\$0	\$43,120
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		U.C. per WK			1263.2	0	0	0	0	1263.2
	Full Time Safety Representative - General Subcontractor	22.00	880	CN-LABR \$31.58	\$27,790	\$0	\$0	\$0	\$0	\$27,790
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	GEN	U.C. per MONTH			0	800	0	0	0	800
	Office/Tool Trailers, Sanitary Facilities, Misc. Equip. - General Subcontractor	5.00	0		\$0	\$4,000	\$0	\$0	\$0	\$4,000

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title IV/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9101.1.02 SUPERVISION & FACILITIES - GENERAL SUBCONTRACTOR										
	GEN	U.C. per LOT			0	2000	0	0	0	2000
	Purchase WAG 4 HASP Safety Equipment - General Subcontractor	1.00	0		\$0	\$2,000	\$0	\$0	\$0	\$2,000
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	Subtotal				\$62,990	\$13,920	\$0	\$0	\$0	\$76,910
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$6,678	\$2,641	\$0	\$0	\$0	\$9,319
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	Subtotal Estimate									\$86,230
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
--- Total	9101.1.02 SUPERVISION & FACILITIES - GENERAL SUBCONTRACTOR		1,760		\$69,669	\$16,561	\$0	\$0	\$0	\$86,230
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--- 9101.1.03 EQUIPMENT DECONTAMINATION - GENERAL SUBCONTRACTOR										
	GEN	U.C. per LOT			0	0	0	2000	0	2000
	Construct Decontamination Pad	1.00	0		\$0	\$0	\$0	\$2,000	\$0	\$2,000
	GEN	U.C. per EA	10	CN-LABR	315.8	0	0	0	0	315.8
	Decontaminate Equipment - General Subcontractor	8.00	80	\$31.58	\$2,526	\$0	\$0	\$0	\$0	\$2,526
Memo: Assume 1 worker for 10 hours per major piece of equipment. Assume that 1 tractor, 1 mower, 1 dozer, 1 backhoe, 1 front end loader, 1 vibratory roller, 1 road grader, & 1 truck must be decontaminated. NOTE: THERE IS A CONFLICT BETWEEN THE SPECIFICATIONS & THE GENERAL PROVISIONS IN REGARD TO WHO DOES THE DECONTAMINATION WORK (BBWI OR SUBCONTRACTOR PERSONNEL). PER DISCUSSIONS WITH THE CONSTRUCTION COORDINATOR & THE TASK COORDINATOR ON 3/28/02, ASSUME THAT RADCON PERSONNEL WILL DO THE MAJORITY OF THE ACTUAL CLEANING. IT IS ALSO ASSUMED THAT BBWI PERSONNEL WILL PROVIDE ANY NECESSARY SUPPLIES, TOOLS, ETC.										
	GEN	U.C. per LOT			0	0	0	1400	0	1400
	Remove Decontamination Pad	1.00	0		\$0	\$0	\$0	\$1,400	\$0	\$1,400
	GEN	U.C. per LOT			0	0	0	3000	0	3000
	Dispose of Dry Material & Water from Decontamination	1.00	0		\$0	\$0	\$0	\$3,000	\$0	\$3,000
<hr/>										
	Subtotal				\$2,526	\$0	\$0	\$6,400	\$0	\$8,926
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$479	\$0	\$0	\$1,214	\$0	\$1,694
<hr/>										
	Subtotal Estimate									\$10,620
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
--- Total	9101.1.03 EQUIPMENT DECONTAMINATION - GENERAL SUBCONTRACTOR		80		\$3,006	\$0	\$0	\$7,614	\$0	\$10,620
<hr/>										
--- 9101.2.01.1 MOBILIZATION - FENCING SUBCONTRACTOR										
	FENCE	U.C. per LOT	20	CN-SKWK	690.4	600	0	0	0	1290.4
	Mobilization - Fencing Subcontractor	1.00	20	\$34.52	\$690	\$600	\$0	\$0	\$0	\$1,290
Memo: 2 workers at 10 hours each to mobilize. Truck, forklift, & misc. equipment for 10 hours at \$60/hour.										

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Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9101.2.01.1 MOBILIZATION - FENCING SUBCONTRACTOR										
Subtotal					\$690	\$600	\$0	\$0	\$0	\$1,290
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$180	\$156	\$0	\$0	\$0	\$336
Subtotal Estimate										\$1,627
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
--- Total 9101.2.01.1 MOBILIZATION - FENCING SUBCONTRACTOR			20		\$870	\$756	\$0	\$0	\$0	\$1,627
--- 9101.2.01.2 DEMOBILIZATION - FENCING SUBCONTRACTOR										
FENCE	U.C. per LOT		20	CN-SKWK	690.4	600	0	0	0	1290.4
Demobilization - Fencing Subcontractor		1.00	20	\$34.52	\$690	\$600	\$0	\$0	\$0	\$1,290
Memo: 2 workers at 10 hours each to demobilize. Truck, forklift, & misc. equipment for 10 hours at \$60/hour.										
Subtotal					\$690	\$600	\$0	\$0	\$0	\$1,290
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$180	\$156	\$0	\$0	\$0	\$336
Subtotal Estimate										\$1,627
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
--- Total 9101.2.01.2 DEMOBILIZATION - FENCING SUBCONTRACTOR			20		\$870	\$756	\$0	\$0	\$0	\$1,627
--- 9101.2.02 SUPERVISION - FENCING SUBCONTRACTOR										
FENCE	U.C. per DAY		10	CN-SUPR	400	90	0	0	0	490
Supervisor & Pickup Truck - Fencing Subcontractor		10.00	100	\$40.00	\$4,000	\$900	\$0	\$0	\$0	\$4,900
Subtotal					\$4,000	\$900	\$0	\$0	\$0	\$4,900
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$1,042	\$235	\$0	\$0	\$0	\$1,277
Subtotal Estimate										\$6,177
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
--- Total 9101.2.02 SUPERVISION - FENCING SUBCONTRACTOR			100		\$5,042	\$1,135	\$0	\$0	\$0	\$6,177
--- 9101.2.03 DECONTAMINATE EQUIP. - FENCING SUBCONTRACTOR										
FENCE	U.C. per EA		10	CN-LABR	315.8	0	0	0	0	315.8
Decontaminate Equipment - Fencing Subcontractor		1.00	10	\$31.58	\$316	\$0	\$0	\$0	\$0	\$316
Memo: Assume 1 worker for 10 hours per major piece of equipment. Assume that 1 forklift or tractor must be decontaminated (used during removal of radiological control fence). REFER TO NOTE FOR THE GENERAL SUBCONTRACTOR DECONTAMINATION WORK IN REGARD TO RESPONSIBILITY FOR THE CLEANING WORK.										

Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
-- 9101.2.03 DECONTAMINATE EQUIP. - FENCING SUBCONTRACTOR										
	Subtotal				\$316	\$0	\$0	\$0	\$0	\$316
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$82	\$0	\$0	\$0	\$0	\$82
	Subtotal Estimate									\$398
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.2.03 DECONTAMINATE EQUIP. - FENCING SUBCONTRACTOR			10		\$398	\$0	\$0	\$0	\$0	\$398
-- 9101.3.01.1 MOBILIZATION - LANDSCAPING SUBCONTRACTOR										
	LAND	U.C. per LOT	48	CN-SKWK	1656.96	2400	0	0	0	4056.96
	Mobilization - Landscaping Subcontractor	1.00	48	\$34.52	\$1,657	\$2,400	\$0	\$0	\$0	\$4,057
Memo: 3 loads of equipment & 1 load of seed & fertilizer at mobilization with 2 workers at 6 hours each/load & \$100/hour/load for equipment costs. Total of 48 manhours & \$2,400 in equipment costs.										
	Subtotal				\$1,657	\$2,400	\$0	\$0	\$0	\$4,057
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$432	\$625	\$0	\$0	\$0	\$1,057
	Subtotal Estimate									\$5,114
	Escalation				\$44	\$64	\$0	\$0	\$0	\$107
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.3.01.1 MOBILIZATION - LANDSCAPING SUBCONTRACTOR			48		\$2,133	\$3,089	\$0	\$0	\$0	\$5,221
-- 9101.3.01.2 DEMOBILIZATION - LANDSCAPING SUBCONTRACTOR										
	LAND	U.C. per LOT	30	CN-SKWK	1035.6	1500	0	0	0	2535.6
	Demobilization - Landscaping Subcontractor	1.00	30	\$34.52	\$1,036	\$1,500	\$0	\$0	\$0	\$2,536
Memo: 3 loads of equipment at demobilization with 2 workers at 5 hours each/load & \$100/hour/load for equipment costs. Total of 30 manhours & \$1,500 in equipment costs.										
	Subtotal				\$1,036	\$1,500	\$0	\$0	\$0	\$2,536
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$270	\$391	\$0	\$0	\$0	\$661
	Subtotal Estimate									\$3,196
	Escalation				\$27	\$40	\$0	\$0	\$0	\$67
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.3.01.2 DEMOBILIZATION - LANDSCAPING SUBCONTRACTOR			30		\$1,333	\$1,931	\$0	\$0	\$0	\$3,263
-- 9101.3.02 SUPERVISION - LANDSCAPING SUBCONTRACTOR										
	LAND	U.C. per DAY	10	CN-SUPR	400	90	0	0	0	490
	Supervisor & Pickup Truck - Landscaping Subcontractor	10.00	100	\$40.00	\$4,000	\$900	\$0	\$0	\$0	\$4,900

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
-- 9101.3.02 SUPERVISION - LANDSCAPING SUBCONTRACTOR										
	Subtotal				\$4,000	\$900	\$0	\$0	\$0	\$4,900
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$1,042	\$235	\$0	\$0	\$0	\$1,277
	Subtotal Estimate									\$6,177
	Escalation				\$106	\$24	\$0	\$0	\$0	\$130
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.3.02 SUPERVISION - LANDSCAPING SUBCONTRACTOR			100		\$5,148	\$1,158	\$0	\$0	\$0	\$6,306
-- 9101.4.01.1 MOBILIZATION - ELECTRICAL SUBCONTRACTOR										
	ELEC	U.C. per LOT			0	0	0	1000	0	1000
	Mobilization - Electrical Subcontractor		1.00	0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
	Subtotal				\$0	\$0	\$0	\$1,000	\$0	\$1,000
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$0	\$0	\$0	\$319	\$0	\$319
	Subtotal Estimate									\$1,319
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.4.01.1 MOBILIZATION - ELECTRICAL SUBCONTRACTOR			0		\$0	\$0	\$0	\$1,319	\$0	\$1,319
-- 9101.4.01.2 DEMOBILIZATION - ELECTRICAL SUBCONTRACTOR										
	ELEC	U.C. per LOT			0	0	0	800	0	800
	Demobilization - Electrical Subcontractor		1.00	0	\$0	\$0	\$0	\$800	\$0	\$800
	Subtotal				\$0	\$0	\$0	\$800	\$0	\$800
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$0	\$0	\$0	\$256	\$0	\$256
	Subtotal Estimate									\$1,056
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
--Total 9101.4.01.2 DEMOBILIZATION - ELECTRICAL SUBCONTRACTOR			0		\$0	\$0	\$0	\$1,056	\$0	\$1,056
-- 9101.4.02 SUPERVISION - ELECTRICAL SUBCONTRACTOR										
	ELEC	U.C. per DAY			400	90	0	0	0	490
	Supervisor & Pickup Truck - Electrical Subcontractor		4.00	40	\$40.00	\$1,600	\$360	\$0	\$0	\$1,960

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Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title IV/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Mati	S/C	Other	TOTAL
9101.4.02 SUPERVISION - ELECTRICAL SUBCONTRACTOR										
Subtotal					\$1,600	\$360	\$0	\$0	\$0	\$1,960
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$511	\$115	\$0	\$0	\$0	\$626
Subtotal Estimate										\$2,586
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9101.4.02 SUPERVISION - ELECTRICAL SUBCONTRACTOR			40		\$2,111	\$475	\$0	\$0	\$0	\$2,586
9102.1 MOW VEGETATION										
GEN	U.C. per DAY		10	CN-EQMD	347.5	400	0	0	0	747.5
Mow Cover & Sideslope Areas (8.5 Acres)		2.00	20	\$34.75	\$695	\$800	\$0	\$0	\$0	\$1,495
Memo: Farm tractor & mower at \$40/hour or \$400/day.										
Subtotal					\$695	\$800	\$0	\$0	\$0	\$1,495
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$132	\$152	\$0	\$0	\$0	\$284
Subtotal Estimate										\$1,779
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.1 MOW VEGETATION			20		\$827	\$952	\$0	\$0	\$0	\$1,779
9102.2.01 DEMO DISTRIBUTION BOXES										
GEN	U.C. per EA		8	CN-SKWK	276.16	80	0	0	0	356.16
Demolish Above Grade Distribution Boxes		5.00	40	\$34.52	\$1,381	\$400	\$0	\$0	\$0	\$1,781
Subtotal					\$1,381	\$400	\$0	\$0	\$0	\$1,781
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$262	\$76	\$0	\$0	\$0	\$338
Subtotal Estimate										\$2,119
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.2.01 DEMO DISTRIBUTION BOXES			40		\$1,643	\$476	\$0	\$0	\$0	\$2,119
9102.2.02 DEMO RAD. CONTROL FENCE										
FENCE	U.C. per LF		0.02	CN-SKWK	0.69	0.07	0	0	0	0.76
Remove Existing Rad. Control Fence (T-Posts & 2 Wires)		2,590.00	52	\$34.52	\$1,788	\$181	\$0	\$0	\$0	\$1,969
Memo: Haul to CFA excess yard for salvage.										

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Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.2.02 DEMO RAD. CONTROL FENCE										
Subtotal					\$1,788	\$181	\$0	\$0	\$0	\$1,969
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$466	\$47	\$0	\$0	\$0	\$513
Subtotal Estimate										\$2,483
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.2.02 DEMO RAD. CONTROL FENCE			52		\$2,254	\$229	\$0	\$0	\$0	\$2,483
9102.3.01.1 TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT										
Memo: 1 mile loaded haul. Assume that a Caterpillar 966 5 CY front end loader can load 14 FCY (fill CY, in place & compacted) bottom dump trucks at a rate of 200 FCY/hour. Assume that trucks are constantly available & it takes 4 minutes for loading, 5 minutes to haul a load to the drainfield, 7 minutes to unload, & 4 minutes to return to the pit = 20 minutes/round trip. This equates to 3 loads or 42 FCY/hour/truck. 5 trucks are required to keep up with the loading rate. 7,600 FCY divided by (200 cy/hour x 10 hours/day) = 3.80 crew days. Stockpile material vs. dumping it onto the existing drainfield due to equipment contamination concerns. Fuel/lube truck with operator is included in equipment rates typical throughout the estimate.										
GEN	U.C. per DAY		10	CN-EQHV	354.9	683	0	0	0	1037.9
Caterpillar 966 5 CY Front End Loader with Operator		3.80	38	\$35.49	\$1,349	\$2,595	\$0	\$0	\$0	\$3,944
Memo: \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour or \$683/day excluding operator. Source: Rental Rate Blue Book.										
TRUCK	U.C. per DAY		50	CN-TRHV	1674	2875	0	0	0	4549
30 Ton Bottom Dump with Tractor & Driver (7 Each)		3.80	190	\$33.48	\$6,361	\$10,925	\$0	\$0	\$0	\$17,286
Memo: \$27.30/hour rental costs plus \$30.25/hour operating costs = \$57.55/hour or \$575/day/truck (\$2,875/day for 5 trucks) excluding drivers. Source: Rental Rate Blue Book.										
GEN	U.C. per DAY		10	CN-EQMD	347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control		3.80	38	\$34.75	\$1,321	\$1,467	\$0	\$0	\$0	\$2,787
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book. Assume that 1 water truck can service both the CFA Pit & the drainfield stockpile area due to their close proximity.										
GEN	U.C. per DAY		20	CN-LABR	631.6	0	0	0	0	631.6
Laborer Support for Staging Trucks, Traffic Control (2 Each)		3.80	76	\$31.58	\$2,400	\$0	\$0	\$0	\$0	\$2,400
Subtotal					\$11,430	\$14,987	\$0	\$0	\$0	\$26,418
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$1,280	\$1,317	\$0	\$0	\$0	\$2,597
Subtotal Estimate										\$29,014
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.3.01.1 TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT			342		\$12,710	\$16,304	\$0	\$0	\$0	\$29,014
9102.3.01.2 PLACE LAYER 4 - PIT RUN GRAVEL										
Memo: Place material with 2 Cat D8 dozers being fed stockpiled material from all sides by 2 Cat 950 front end loaders (each loader should be able to stock 800-1,200 FCY of material per day). Assume production rate of 800 FCY/dozer/day = 1,600 FCY/day. 7,600 FCY divided by 1,600 = 4.8 days. Grader, vibratory roller, water truck, & a laborer full time.										
GEN	U.C. per DAY		20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2 -Man Crew)		3.00	60	\$33.17	\$1,990	\$0	\$0	\$0	\$0	\$1,990
Memo: Includes 1 day for topographical survey of final surface & volume calculations. Assume that this can be done without interfering with cobble placement.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title I/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL			
-- 9102.3.01.2 PLACE LAYER 4 - PIT RUN GRAVEL													
Memo: Place material with 2 Cat D8 dozers being fed stockpiled material from all sides by 2 Cat 950 front end loaders (each loader should be able to stock 800-1,200 FCY of material per day). Assume production rate of 800 FCY/dozer/day = 1,600 FCY/day. 7,600 FCY divided by 1,600 = 4.8 days. Grader, vibratory roller, water truck, & a laborer full time.													
	GEN	U.C. per DAY	20	CN-EQHV	709.8	2210	0	0	0	2919.8			
Caterpillar D8 Dozer with Operator (2 Each)					4.80	96	\$35.49	\$3,407	\$10,608	\$0	\$0	\$0	\$14,015
Memo: \$72.55/hour rental costs plus \$37.95/hour operating costs = \$110.50/hour or \$1,105/day excluding operator. Source: Rental Rate Blue Book.													
	GEN	U.C. per DAY	20	CN-EQHV	709.8	1010	0	0	0	1719.8			
Caterpillar 950 4 CY Front End Loader with Operator (2 Each)					4.80	96	\$35.49	\$3,407	\$4,848	\$0	\$0	\$0	\$8,255
Memo: \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator. Source: Rental Rate Blue Book.													
	GEN	U.C. per DAY	10	CN-EQHV	354.9	530	0	0	0	884.9			
Caterpillar 140 Road Grader with Operator					4.80	48	\$35.49	\$1,704	\$2,544	\$0	\$0	\$0	\$4,248
Memo: \$33.79/hour rental costs plus \$19.25/hour operating costs = \$53.04/hour or \$530/day excluding operator. Source: Rental Rate Blue Book.													
	GEN	U.C. per DAY	10	CN-EQMD	347.5	475	0	0	0	822.5			
Caterpillar CB534B Double Drum 20,500 LB. Vibratory Roller with Operator					4.80	48	\$34.75	\$1,668	\$2,280	\$0	\$0	\$0	\$3,948
Memo: \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$475/day excluding operator. Source: Rental Rate Blue Book.													
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5			
4,000 Gallon Water Truck with Operator for Dust Control/Compaction					4.80	48	\$34.75	\$1,668	\$1,853	\$0	\$0	\$0	\$3,521
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.													
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8			
Laborer Support					4.80	48	\$31.58	\$1,516	\$0	\$0	\$0	\$0	\$1,516
Subtotal							\$15,360	\$22,133	\$0	\$0	\$0	\$0	\$37,492
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads							\$2,914	\$4,199	\$0	\$0	\$0	\$0	\$7,113
Subtotal Estimate													\$44,606
Escalation							\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$0	\$0	\$0	\$0	\$0	\$0	\$0
-- Total 9102.3.01.2 PLACE LAYER 4 - PIT RUN GRAVEL			444		\$18,274	\$26,332	\$0	\$0	\$0	\$44,606			
-- 9102.3.02.1 TRANSPORT LAYER 3 - COBBLES FROM I.F.													
Memo: Material is to be stockpiled in advance of placing operations.													
	ROCK	U.C. per CY			0	0	25.71	0	0	25.71			
Purchase & Deliver Cobble					8,560.00	0	\$0	\$0	\$220,078	\$0	\$0	\$0	\$220,078
Memo: Price is per 9/9/01 quotation from Phenix of Idaho. Delivery rate of 500 CY/day. 8,560 CY divided by 500 = 17 days.													
	GEN	U.C. per LOT			0	0	0	100	0	100			
Submit Sieve Analysis Reports					1.00	0	\$0	\$0	\$0	\$100	\$0	\$0	\$100
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5			
4,000 Gallon Water Truck with Operator for Dust Control					17.00	170	\$34.75	\$5,908	\$6,562	\$0	\$0	\$0	\$12,470
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.													

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.02.1 TRANSPORT LAYER 3 - COBBLES FROM I.F.										
<i>Memo: Material is to be stockpiled in advance of placing operations.</i>										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
Laborer Support for Staging Trucks, Traffic Control			17.00		\$5,369	\$0	\$0	\$0	\$0	\$5,369
<hr/>										
Subtotal					\$11,276	\$6,562	\$220,078	\$100	\$0	\$238,016
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$2,139	\$1,245	\$11,004	\$19	\$0	\$14,407
<hr/>										
Subtotal Estimate										\$252,423
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
→ Total 9102.3.02.1 TRANSPORT LAYER 3 - COBBLES FROM I.F.			340		\$13,415	\$7,807	\$231,081	\$119	\$0	\$252,423
<hr/>										
9102.3.02.2 PLACE LAYER 3 - COBBLES										
<i>Memo: Place material with 2 Cat D8 dozers being fed stockpiled material from all sides by 2 Cat 950 front end loaders. Assume production rate of 700 FCY/dozer/day = 1,400 FCY/day. 8,560 FCY divided by 1,400 = 6.1 days. Water truck & a laborer full time. Vibratory roller for 1-2 passes without vibration upon placement of all material. Assume that a grader is not necessary.</i>										
	GEN	U.C. per DAY	20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2-Man Crew)			4.00		\$2,654	\$0	\$0	\$0	\$0	\$2,654
<i>Memo: Includes 1 day for topographical survey of final surface & volume calculations. Assume that this can be done without interfering with pea gravel placement.</i>										
	GEN	U.C. per DAY	20	CN-EQHV	709.8	2210	0	0	0	2919.8
Caterpillar D8 Dozer with Operator (2 Each)			6.10		\$4,330	\$13,481	\$0	\$0	\$0	\$17,811
<i>Memo: \$72.55/hour rental costs plus \$37.95/hour operating costs = \$110.50/hour or \$1,105/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	20	CN-EQHV	709.8	1010	0	0	0	1719.8
Caterpillar 950 4 CY Front End Loader with Operator (2 Each)			6.10		\$4,330	\$6,161	\$0	\$0	\$0	\$10,491
<i>Memo: \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per ACRE	1	CN-EQMD	34.75	47.53	0	0	0	82.28
Caterpillar CB534B Double Drum 20,500 LB. Vibratory Roller with Operator			8.70		\$302	\$414	\$0	\$0	\$0	\$716
<i>Memo: \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$47.53/acre excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control			6.10		\$2,120	\$2,355	\$0	\$0	\$0	\$4,474
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.</i>										

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Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title I/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.02.2 PLACE LAYER 3 - COBBLES										
<i>Memo: Place material with 2 Cat D8 dozers being fed stockpiled material from all sides by 2 Cat 950 front end loaders. Assume production rate of 700 FCY/dozer/day = 1,400 FCY/day. 8,560 FCY divided by 1,400 = 6.1 days. Water truck & a laborer full time. Vibratory roller for 1-2 passes without vibration upon placement of all material. Assume that a grader is not necessary.</i>										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
Laborer Support		6.10	61	\$31.58	\$1,926	\$0	\$0	\$0	\$0	\$1,926
<hr/>										
Subtotal					\$15,662	\$22,410	\$0	\$0	\$0	\$38,072
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$2,971	\$4,252	\$0	\$0	\$0	\$7,223
<hr/>										
Subtotal Estimate										\$45,295
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
---Total 9102.3.02.2 PLACE LAYER 3 - COBBLES			455		\$18,633	\$26,662	\$0	\$0	\$0	\$45,295
<hr/>										
9102.3.03.1 TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.										
<i>Memo: Material is to be stockpiled & spread with a small dozer.</i>										
	ROCK	U.C. per CY			0	0	26.27	0	0	26.27
Purchase & Deliver Pea Gravel		2,940.00	0		\$0	\$0	\$77,234	\$0	\$0	\$77,234
<i>Memo: Price is per 9/9/01 quotation from Phenix of Idaho. Delivery rate of 500 CY/day. 2,940 CY divided by 500 = 6 days.</i>										
	GEN	U.C. per LOT			0	0	0	50	0	50
Provide Sieve Analysis Reports		1.00	0		\$0	\$0	\$0	\$50	\$0	\$50
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control		6.00	60	\$34.75	\$2,085	\$2,316	\$0	\$0	\$0	\$4,401
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
Laborer Support for Staging Trucks, Traffic Control		6.00	60	\$31.58	\$1,895	\$0	\$0	\$0	\$0	\$1,895
<hr/>										
Subtotal					\$3,980	\$2,316	\$77,234	\$50	\$0	\$83,580
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$755	\$439	\$3,862	\$9	\$0	\$5,066
<hr/>										
Subtotal Estimate										\$88,645
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
---Total 9102.3.03.1 TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.			120		\$4,735	\$2,755	\$81,095	\$59	\$0	\$88,645
<hr/>										
9102.3.03.2 PLACE LAYER 2 - PEA GRAVEL										
<i>Memo: Place material with 2 Cat D4 dozers being fed stockpiled material from all sides with 1 Cat 950 front end loader (loader should be able to stock 800-1,200 FCY/day of material). Assume production rate of 400 FCY/dozer/day = 800 FCY/day. 2,940 FCY divided by 800 = 3.7 days. Water truck & a laborer full time. Vibratory roller for 1-2 passes without vibration upon placement of all material. Assume that a grader would not perform well working in the pea gravel. No funds are included in the estimate for installing filter fabric between the layers of cobble & pea gravel to prevent the materials from blending.</i>										
	GEN	U.C. per DAY	20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2-Man Crew)		3.00	60	\$33.17	\$1,990	\$0	\$0	\$0	\$0	\$1,990
<i>Memo: Includes 1 day for topographical survey of final surface & volume calculations. Assume that this can be done without interfering with clay & silt loam placement.</i>										

Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.03.2 PLACE LAYER 2 - PEA GRAVEL										
Memo: Place material with 2 Cat D4 dozers being fed stockpiled material from all sides with 1 Cat 950 front end loader (loader should be able to stock 800-1,200 FCY/day of material). Assume production rate of 400 FCY/dozer/day = 800 FCY/day. 2,940 FCY divided by 800 = 3.7 days. Water truck & a laborer full time. Vibratory roller for 1-2 passes without vibration upon placement of all material. Assume that a grader would not perform well working in the pea gravel. No funds are included in the estimate for installing filter fabric between the layers of cobble & pea gravel to prevent the materials from blending.										
	GEN	U.C. per DAY	20	CN-EQMD	695	832	0	0	0	1527
	Caterpillar D4 Dozer with Operator (2 Each)	3.70	74	\$34.75	\$2,572	\$3,078	\$0	\$0	\$0	\$5,650
Memo: \$26.48/hour rental costs plus \$15.15/hour operating costs = \$41.63/hour or \$416/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	505	0	0	0	859.9
	Caterpillar 950 4 CY Front End Loader with Operator	3.70	37	\$35.49	\$1,313	\$1,869	\$0	\$0	\$0	\$3,182
Memo: \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per ACRE	1	CN-EQMD	34.75	47.53	0	0	0	82.28
	Caterpillar CB534B Double Drum 20,500 LB. Vibratory Roller with Operator	10.00	10	\$34.75	\$348	\$475	\$0	\$0	\$0	\$823
Memo: \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$47.53/acre excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
	4,000 Gallon Water Truck with Operator for Dust Control	3.70	37	\$34.75	\$1,286	\$1,428	\$0	\$0	\$0	\$2,714
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
	Laborer Support	3.70	37	\$31.58	\$1,168	\$0	\$0	\$0	\$0	\$1,168
<hr/>										
	Subtotal				\$8,677	\$6,850	\$0	\$0	\$0	\$15,527
	Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$1,646	\$1,300	\$0	\$0	\$0	\$2,946
<hr/>										
	Subtotal Estimate									\$18,473
	Escalation				\$0	\$0	\$0	\$0	\$0	\$0
	Contingency				\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
— Total	9102.3.03.2 PLACE LAYER 2 - PEA GRAVEL		255		\$10,323	\$8,150	\$0	\$0	\$0	\$18,473
<hr/>										
9102.3.04.1 TRANSPORT CLAY LOAM FROM SPREADING AREA A										
Memo: 9 mile loaded haul. Assume that a Caterpillar 966 5 CY front end loader can load 14 FCY bottom dump trucks at a rate of 200 FCY/hour. Assume that it takes 4 minutes to load a truck, 16 minutes at 35 miles/hour to haul a load to the drainfield, 7 minutes to unload (assume that trucks can be driven over the cover area for dumping after the initial lift of loam is placed & compacted), & 14 minutes at 40 miles/hour to return to the pit = 41 minutes/round trip. This equates to 1.46 loads or 20.44 FCY/hour/truck. Assume that a maximum of 10 trucks (204 FCY/hour total, say 200 due to loading rate) could be utilized due to traffic & congestion. 15,500 FCY divided by (200 cy/hour x 10 hours/day) = 7.75 crew days. Include loader & operator for an additional day to remove & set aside the top 12" of soil before hauling begins.										
	GEN	U.C. per DAY	10	CN-EQHV	354.8	683	0	0	0	1037.9
	Caterpillar 966 5 CY Front End Loader with Operator	8.75	88	\$35.49	\$3,105	\$5,976	\$0	\$0	\$0	\$9,082
Memo: \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour or \$683/day excluding operator. Source: Rental Rate Blue Book.										
	TRUCK	U.C. per DAY	100	CN-TRHV	3348	5750	0	0	0	9098
	30 Ton Bottom Dump with Tractor & Driver (10 Each)	7.75	775	\$33.48	\$25,947	\$44,563	\$0	\$0	\$0	\$70,510
Memo: \$27.30/hour rental costs plus \$30.25/hour operating costs = \$57.55/hour or \$575/day/truck (\$5,750/day for 10 trucks) excluding drivers. Source: Rental Rate Blue Book.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9102.3.04.1 TRANSPORT CLAY LOAM FROM SPREADING AREA A										
Memo: 9 mile loaded haul. Assume that a Caterpillar 966 5 CY front end loader can load 14 FCY bottom dump trucks at a rate of 200 FCY/hour. Assume that it takes 4 minutes to load a truck, 16 minutes at 35 miles/hour to haul a load to the drainfield, 7 minutes to unload (assume that trucks can be driven over the cover area for dumping after the initial lift of loam is placed & compacted), & 14 minutes at 40 miles/hour to return to the pit = 41 minutes/round trip. This equates to 1.46 loads or 20.44 FCY/hour/truck. Assume that a maximum of 10 trucks (204 FCY/hour total, say 200 due to loading rate) could be utilized due to traffic & congestion. 15,500 FCY divided by (200 cy/hour x 10 hours/day) = 7.75 crew days. Include loader & operator for an additional day to remove & set aside the top 12" of soil before hauling begins.										
	GEN	U.C. per DAY	20	CN-EQMD	695	772	0	0	0	1467
4,000 Gallon Water Truck with Operator for Dust Control (2 Each)		7.75	155	\$34.75	\$5,386	\$5,983	\$0	\$0	\$0	\$11,369
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day/truck excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	20	CN-LABR	631.6	0	0	0	0	631.6
Laborer Support for Staging Trucks, Traffic Control (2 Each)		7.75	155	\$31.58	\$4,895	\$0	\$0	\$0	\$0	\$4,895
<hr/>										
Subtotal					\$39,334	\$58,522	\$0	\$0	\$0	\$95,855
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$3,837	\$4,497	\$0	\$0	\$0	\$8,334
<hr/>										
Subtotal Estimate										\$104,190
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>										
--- Total 9102.3.04.1 TRANSPORT CLAY LOAM FROM SPREADING AREA A			1,173		\$43,171	\$61,019	\$0	\$0	\$0	\$104,190
<hr/>										
--- 9102.3.04.2 PLACE PERIMETER LAYER - CLAY LOAM FROM SPREADING AREA A										
Memo: Place material with a Cat D8 dozer & a Cat 140 grader being fed from trucks (assume 800 FCY/day can be dumped onto the drainfield) or from stockpiled material (with a Cat 950 front end loader which should be able to stock 800-1,200 FCY of material per day, assume 800 FCY/day). Total placement rate is 1,600 FCY/day. 15,500 FCY divided by 1,600 = 9.69 days. Include Cat D4 dozer for 3 days to assist with spreading initial lift onto pea gravel. Grader, vibratory roller, water truck, & a laborer full time.										
	GEN	U.C. per DAY	20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2-Man Crew)		4.00	80	\$33.17	\$2,654	\$0	\$0	\$0	\$0	\$2,654
	GEN	U.C. per DAY	10	CN-EQHV	354.9	1105	0	0	0	1459.9
Caterpillar D8 Dozer with Operator		9.70	97	\$35.49	\$3,443	\$10,719	\$0	\$0	\$0	\$14,161
Memo: \$72.55/hour rental costs plus \$37.95/hour operating costs = \$110.50/hour or \$1,105/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	505	0	0	0	859.9
Caterpillar 950 4 CY Front End Loader with Operator		9.70	97	\$35.49	\$3,443	\$4,899	\$0	\$0	\$0	\$8,341
Memo: \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	416	0	0	0	763.5
Caterpillar D4 Dozer with Operator		2.00	20	\$34.75	\$695	\$832	\$0	\$0	\$0	\$1,527
Memo: \$26.48/hour rental costs plus \$15.15/hour operating costs = \$41.63/hour or \$416/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	530	0	0	0	884.9
Caterpillar 140 Road Grader with Operator		9.70	97	\$35.49	\$3,443	\$5,141	\$0	\$0	\$0	\$8,584
Memo: \$33.79/hour rental costs plus \$19.25/hour operating costs = \$53.04/hour or \$530/day excluding operator. Source: Rental Rate Blue Book.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.04.2 PLACE PERIMETER LAYER - CLAY LOAM FROM SPREADING AREA A										
<i>Memo: Place material with a Cat D8 dozer & a Cat 140 grader being fed from trucks (assume 800 FCY/day can be dumped onto the drainfield) or from stockpiled material (with a Cat 950 front end loader which should be able to stock 800-1,200 FCY of material per day, assume 800 FCY/day). Total placement rate is 1,600 FCY/day. 15,500 FCY divided by 1,600 = 9.69 days. Include Cat D4 dozer for 3 days to assist with spreading initial lift onto pea gravel. Grader, vibratory roller, water truck, & a laborer full time.</i>										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	475	0	0	0	822.5
Caterpillar CB534B Double Drum 20,500 LB. Vibratory Roller with Operator		9.70	97	\$34.75	\$3,371	\$4,608	\$0	\$0	\$0	\$7,978
<i>Memo: \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$475/day excluding operator. Source: Rental Rate Blue Book. Note: This is a smooth drum roller (required per Specifications) that will not achieve compaction with clay/silt material as well as a sheepsfoot roller will.</i>										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control/Compaction		9.70	97	\$34.75	\$3,371	\$3,744	\$0	\$0	\$0	\$7,115
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
Laborer Support		9.70	97	\$31.58	\$3,063	\$0	\$0	\$0	\$0	\$3,063
Subtotal					\$23,481	\$29,942	\$0	\$0	\$0	\$53,423
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$4,455	\$5,681	\$0	\$0	\$0	\$10,136
Subtotal Estimate										\$63,558
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total 9102.3.04.2 PLACE PERIMETER LAYER - CLAY LOAM FROM SPREADING AREA A			682		\$27,936	\$35,622	\$0	\$0	\$0	\$63,558
9102.3.05.1 TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.										
<i>Memo: 11 mile loaded haul. Assume that a Caterpillar 966 5 CY front end loader can load 14 FCY bottom dump trucks at a rate of 200 FCY/hour. Assume that it takes 4 minutes to load a truck, 19 minutes at 35 miles/hour to haul a load to the drainfield, 7 minutes to unload (assume that trucks can be driven over the cover area for unloading after the initial lift of loam is placed & compacted), & 17 minutes at 40 miles/hour to return to the pit = 47 minutes/round trip. This equates to 1.28 loads or 17.87 FCY/hour/truck. Assume that a maximum of 10 trucks (179 FCY/hour) could be utilized due to traffic & congestion. 31,950 FCY divided by (179 cy/hour x 10 hours/day) = 17.85 crew days.</i>										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	683	0	0	0	1037.9
Caterpillar 966 5 CY Front End Loader with Operator		17.85	179	\$35.49	\$6,335	\$12,192	\$0	\$0	\$0	\$18,527
<i>Memo: \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour or \$683/day excluding operator. Source: Rental Rate Blue Book.</i>										
	TRUCK	U.C. per DAY	100	CN-TRHV	3348	5750	0	0	0	9098
30 Ton Bottom Dump with Tractor & Driver (10 Each)		17.85	1,785	\$33.48	\$59,762	\$102,638	\$0	\$0	\$0	\$162,399
<i>Memo: \$27.30/hour rental costs plus \$30.25/hour operating costs = \$57.55/hour or \$575/day/truck (\$5,750/day for 10 trucks) excluding drivers. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	20	CN-EQMD	695	772	0	0	0	1467
4,000 Gallon Water Truck with Operator for Dust Control (2 Each)		17.85	357	\$34.75	\$12,406	\$13,780	\$0	\$0	\$0	\$26,186
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day/truck excluding operator. Source: Rental Rate Blue Book.</i>										

Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const	Eqp	Matl	S/C	Other	TOTAL
---	9102.3.05.1 TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.										
	<i>Memo: 11 mile loaded haul. Assume that a Caterpillar 966 5 CY front end loader can load 14 FCY bottom dump trucks at a rate of 200 FCY/hour. Assume that it takes 4 minutes to load a truck, 19 minutes at 35 miles/hour to haul a load to the drainfield, 7 minutes to unload (assume that trucks can be driven over the cover area for unloading after the initial lift of loam is placed & compacted), & 17 minutes at 40 miles/hour to return to the pit = 47 minutes/round trip. This equates to 1.28 loads or 17.87 FCY/hour/truck. Assume that a maximum of 10 trucks (179 FCY/hour) could be utilized due to traffic & congestion. 31,950 FCY divided by (179 cy/hour x 10 hours/day) = 17.85 crew days.</i>										
	GEN	U.C. per DAY	20	CN-LABR	631.6		0	0	0	0	631.6
	Laborer Support for Staging Trucks, Traffic Control (2 Each)										
			17.85	357	\$31.58	\$11,274	\$0	\$0	\$0	\$0	\$11,274
	<i>Memo: Perform topographical survey of Lincoln Blvd. Pit before & after material removal, calculate volumes, etc.</i>										
	Subtotal				\$89,777	\$128,609		\$0	\$0	\$0	\$218,386
	Sales Tax				\$0	\$0		\$0	\$0	\$0	\$0
	INEEL ORG Labor/Subcontractor Overheads				\$8,683	\$10,059		\$0	\$0	\$0	\$18,742
	Subtotal Estimate										\$237,128
	Escalation				\$0	\$0		\$0	\$0	\$0	\$0
	Contingency				\$0	\$0		\$0	\$0	\$0	\$0
---	Total 9102.3.05.1 TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.										
			2,678		\$98,459	\$138,669		\$0	\$0	\$0	\$237,128
---	9102.3.05.2 PLACE LAYER 1 - SILT LOAM FROM LINCOLN BLVD. PIT										
	<i>Memo: Place material with a Cat D8 dozer & a Cat 140 grader being fed from trucks (assume 800 FCY/day can be dumped onto the drainfield) or from stockpiled material (with a Cat 950 front end loader which should be able to stock 800-1,200 FCY of material per day, assume 800 FCY/day). Total placement rate is 1,600 FCY/day. 31,950 FCY divided by 1,600 = 19.97 days. Include Cat D4 dozer for 3 days to assist with spreading initial lift onto pea gravel. Grader, vibratory roller, water truck, & a laborer full time.</i>										
	GEN	U.C. per DAY	20	CN-SURV	663.4		0	0	0	0	663.4
	Surveying - (2-Man Crew)										
			7.00	140	\$33.17	\$4,644	\$0	\$0	\$0	\$0	\$4,644
	GEN	U.C. per DAY	10	CN-EQHV	354.9	1105		0	0	0	1459.9
	Caterpillar D8 Dozer with Operator										
			20.00	200	\$35.49	\$7,098	\$22,100	\$0	\$0	\$0	\$29,198
	<i>Memo: \$72.65/hour rental costs plus \$37.95/hour operating costs = \$110.60/hour or \$1,106/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	505		0	0	0	859.9
	Caterpillar 950 4 CY Front End Loader with Operator										
			20.00	200	\$35.49	\$7,098	\$10,100	\$0	\$0	\$0	\$17,198
	<i>Memo: \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	416		0	0	0	763.5
	Caterpillar D4 Dozer with Operator										
			3.00	30	\$34.75	\$1,043	\$1,248	\$0	\$0	\$0	\$2,291
	<i>Memo: \$26.48/hour rental costs plus \$15.15/hour operating costs = \$41.63/hour or \$416/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-EQHV	354.9	530		0	0	0	884.9
	Caterpillar 140 Road Grader with Operator										
			20.00	200	\$35.49	\$7,098	\$10,600	\$0	\$0	\$0	\$17,698
	<i>Memo: \$33.79/hour rental costs plus \$19.25/hour operating costs = \$53.04/hour or \$530/day excluding operator. Source: Rental Rate Blue Book.</i>										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	475		0	0	0	822.5
	Caterpillar CB534B Double Drum 20,500 LB. Vibratory Roller with Operator										
			20.00	200	\$34.75	\$6,950	\$9,500	\$0	\$0	\$0	\$16,450
	<i>Memo: \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$475/day excluding operator. Source: Rental Rate Blue Book. Note: This is a smooth drum roller (required per Specifications) that will not achieve compaction with clay/silt material as well as a sheepfoot roller will.</i>										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.05.2 PLACE LAYER 1 - SILT LOAM FROM LINCOLN BLVD. PIT										
Memo: Place material with a Cat D8 dozer & a Cat 140 grader being fed from trucks (assume 800 FCY/day can be dumped onto the drainfield) or from stockpiled material (with a Cat 950 front end loader which should be able to stock 800-1,200 FCY of material per day, assume 800 FCY/day). Total placement rate is 1,600 FCY/day. 31,950 FCY divided by 1,600 = 19.97 days. Include Cat D4 dozer for 3 days to assist with spreading initial lift onto pea gravel. Grader, vibratory roller, water truck, & a laborer full time.										
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control/Compaction		20.00	200	\$34.75	\$6,950	\$7,720	\$0	\$0	\$0	\$14,670
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.										
	GEN	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
Laborer Support		20.00	200	\$31.58	\$6,316	\$0	\$0	\$0	\$0	\$6,316
Subtotal					\$47,196	\$61,268	\$0	\$0	\$0	\$108,464
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$8,954	\$11,624	\$0	\$0	\$0	\$20,579
Subtotal Estimate										\$129,043
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.3.05.2 PLACE LAYER 1 - SILT LOAM FROM LINCOLN BLVD. PIT			1,370		\$56,151	\$72,892	\$0	\$0	\$0	\$129,043
9102.3.06.1 SURVEY BORROW PITS BEFORE MATERIAL REMOVAL										
	GEN	U.C. per DAY	20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2-Man Crew)		2.00	40	\$33.17	\$1,327	\$0	\$0	\$0	\$0	\$1,327
Memo: Perform topographical survey of the 3 borrow pits before material removal.										
Subtotal					\$1,327	\$0	\$0	\$0	\$0	\$1,327
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$252	\$0	\$0	\$0	\$0	\$252
Subtotal Estimate										\$1,579
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.3.06.1 SURVEY BORROW PITS BEFORE MATERIAL REMOVAL			40		\$1,579	\$0	\$0	\$0	\$0	\$1,579
9102.3.06.2 SURVEY BORROW PITS AFTER RE-GRADING										
	GEN	U.C. per DAY	20	CN-SURV	663.4	0	0	0	0	663.4
Surveying - (2-Man Crew)		3.00	60	\$33.17	\$1,990	\$0	\$0	\$0	\$0	\$1,990
Memo: Perform topographical survey of the 3 borrow pits after material removal, calculate volumes, etc.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3.06.2 SURVEY BORROW PITS AFTER RE-GRADING										
Subtotal					\$1,990	\$0	\$0	\$0	\$0	\$1,990
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$378	\$0	\$0	\$0	\$0	\$378
Subtotal Estimate										\$2,368
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total 9102.3.06.2 SURVEY BORROW PITS AFTER RE-GRADING			60		\$2,368	\$0	\$0	\$0	\$0	\$2,368
9102.3.06.3 SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION										
	GEN	U.C. per DAY								
Surveying - (2-Man Crew)			2.00	20	CN-SURV	663.4	0	0	0	663.4
				40	\$33.17	\$1,327	\$0	\$0	\$0	\$1,327
Memo: Topographical survey of final surface & volume calculations.										
Subtotal					\$1,327	\$0	\$0	\$0	\$0	\$1,327
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$252	\$0	\$0	\$0	\$0	\$252
Subtotal Estimate										\$1,579
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total 9102.3.06.3 SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION			40		\$1,579	\$0	\$0	\$0	\$0	\$1,579
9102.3.07 PLACE PIT RUN GRAVEL IN DISTRIBUTION BOXES										
	GEN	U.C. per EA								
Place Pit Run Gravel in Distribution Boxes			5.00	4	CN-SKWK	138.08	30	0	0	168.08
				20	\$34.52	\$690	\$150	\$0	\$0	\$840
Subtotal					\$690	\$150	\$0	\$0	\$0	\$840
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$131	\$28	\$0	\$0	\$0	\$159
Subtotal Estimate										\$1,000
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total 9102.3.07 PLACE PIT RUN GRAVEL IN DISTRIBUTION BOXES			20		\$821	\$178	\$0	\$0	\$0	\$1,000
9102.3.08 PROOF ROLL DRAINFIELD										
	GEN	U.C. per ACRE								
Proof Roll Drainfield with 4 Passes (Vibratory Roller with Operator)			10.00	2	CN-EQMD	69.5	95.06	0	0	164.56
				20	\$34.75	\$695	\$951	\$0	\$0	\$1,646
Memo: \$36.73/hour rental costs for roller plus \$10.80/hour operating costs = \$47.53/hour or \$95.06/acre excluding operator. Source: Rental Rate Blue Book.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>	<u>Org/Subcontractor</u>	<u>QTY</u>	<u>Hrs</u>	<u>Crew/Rate</u>	<u>Labor</u>	<u>Const Eqp</u>	<u>Matl</u>	<u>S/C</u>	<u>Other</u>	<u>TOTAL</u>
— 9102.3.08 PROOF ROLL DRAINFIELD										
Subtotal					\$695	\$951	\$0	\$0	\$0	\$1,646
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$132	\$180	\$0	\$0	\$0	\$312
Subtotal Estimate										\$1,958
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
— Total 9102.3.08 PROOF ROLL DRAINFIELD			20		\$827	\$1,131	\$0	\$0	\$0	\$1,958
— 9102.3.09 GRADE & RESHAPE CFA PIT										
GEN	U.C. per ACRE		8	CN-EQHV	283.92	547	0	0	0	830.92
Grade & Reshape Disturbed Areas at CFA Pit		1.00	8	\$35.49	\$284	\$547	\$0	\$0	\$0	\$831
Memo: Assume 1 acre is disturbed. Caterpillar 966 5 CY front end loader with operator. \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour, \$547 for 8 hours (1 acre) excluding operator. Source: Rental Rate Blue Book.										
Subtotal					\$284	\$547	\$0	\$0	\$0	\$831
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$54	\$104	\$0	\$0	\$0	\$158
Subtotal Estimate										\$989
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
— Total 9102.3.09 GRADE & RESHAPE CFA PIT			8		\$338	\$651	\$0	\$0	\$0	\$989
— 9102.3.10 GRADE & RESHAPE SPREADING AREA A										
GEN	U.C. per ACRE		8	CN-EQHV	283.92	547	0	0	0	830.92
Grade & Reshape Disturbed Areas at Spreading Area A		3.00	24	\$35.49	\$852	\$1,641	\$0	\$0	\$0	\$2,493
Memo: Assume 3 acres are disturbed. Caterpillar 966 5 CY front end loader with operator. \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour, \$547 for 8 hours (1 acre) excluding operator. Source: Rental Rate Blue Book.										
Subtotal					\$852	\$1,641	\$0	\$0	\$0	\$2,493
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$162	\$311	\$0	\$0	\$0	\$473
Subtotal Estimate										\$2,966
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
— Total 9102.3.10 GRADE & RESHAPE SPREADING AREA A			24		\$1,013	\$1,952	\$0	\$0	\$0	\$2,966
— 9102.3.11 GRADE & RESHAPE LINCOLN BLVD. PIT										
GEN	U.C. per ACRE		8	CN-EQHV	283.92	547	0	0	0	830.92
Grade & Reshape Disturbed Areas at Lincoln Blvd. Pit		3.00	24	\$35.49	\$852	\$1,641	\$0	\$0	\$0	\$2,493
Memo: Assume 3 acres are disturbed. Caterpillar 966 5 CY front end loader with operator. \$42.42/hour rental costs plus \$25.90/hour operating costs = \$68.32/hour, \$547 for 8 hours (1 acre) excluding operator. Source: Rental Rate Blue Book.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

<u>LEVEL</u>	<u>Org/Subcontractor</u>	<u>QTY</u>	<u>Hrs</u>	<u>Crew/Rate</u>	<u>Labor</u>	<u>Const Eqp</u>	<u>Matl</u>	<u>S/C</u>	<u>Other</u>	<u>TOTAL</u>
9102.3.11 GRADE & RESHAPE LINCOLN BLVD. PIT										
Subtotal					\$852	\$1,641	\$0	\$0	\$0	\$2,493
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$162	\$311	\$0	\$0	\$0	\$473
Subtotal Estimate										\$2,966
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.3.11 GRADE & RESHAPE LINCOLN BLVD. PIT			24		\$1,013	\$1,952	\$0	\$0	\$0	\$2,966
9102.3.12 BUILD RAMP AT SPREADING AREA A										
GEN	U.C. per LOT		60	CN-EQHV	2129.4	4220	1000	0	0	7349.4
Build Ramp at Spreading Area A	1.00		60		\$35.49	\$2,129	\$4,220	\$1,000	\$0	\$7,349
Memo: Allowance-scope of work unknown. Assume 1 Caterpillar D8 dozer with operator, 1 Caterpillar 140 Road Grader with operator, & 1 Caterpillar CB534B double drum roller with operator for 2 days each. \$72.55/hour rental costs plus \$37.95/hour operating costs = \$110.50/hour or \$1,105/day for the dozer excluding operator. Source: Rental Rate Blue Book. \$33.79/hour rental costs plus \$19.25/hour operating costs = \$53.04/hour or \$530/day for the road grader excluding operator. Source: Rental Rate Blue Book. \$36.73/hour rental costs plus \$10.80/hour operating costs = \$47.53/hour or \$475/day for the roller excluding operator. Source: Rental Rate Blue Book. Total equipment cost/day = \$2,110. Material costs include an allowance for culverts & backfill material.										
Subtotal					\$2,129	\$4,220	\$1,000	\$0	\$0	\$7,349
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$404	\$801	\$190	\$0	\$0	\$1,394
Subtotal Estimate										\$8,744
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.3.12 BUILD RAMP AT SPREADING AREA A			60		\$2,533	\$5,021	\$1,190	\$0	\$0	\$8,744
9102.4 INSTALL NEW PERIMETER FENCE										
Memo: Assume that new fence installation work will be performed in late FY 2002 or early FY 2003 prior to revegetation work.										
GEN	U.C. per DAY		20	CN-SURV	663.4	0	0	0	0	663.4
Survey/Layout of New Fence	0.50		10		\$33.17	\$332	\$0	\$0	\$0	\$332
Memo: 2-man crew to lay out fence.										
FENCE	U.C. per LF		0.15	CN-SKWK	5.178	2.3	3	0	0	10.478
Install 6' High Perimeter Chainlink Fence	2,970.00		446		\$34.52	\$15,379	\$6,831	\$8,910	\$0	\$31,120
Memo: Re-use 2,600 LF of GFE fabric from existing perimeter fence, purchase & install 370 LF of new fabric (see activity below for new fabric material cost). Includes furnishing & installing new 2-3/8" diameter line posts 10'-0" O.C. set 3'-6" deep in concrete. No funds for rock drilling for posts are included in the estimate.										
FENCE	U.C. per EA		13	CN-SKWK	448.76	125	200	0	0	773.76
Install GFE 20' Double Swing Chainlink Gates	4.00		52		\$34.52	\$1,795	\$500	\$800	\$0	\$3,095
Memo: Material costs are for new gate posts, concrete, & misc. hardware.										

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.4 INSTALL NEW PERIMETER FENCE										
<i>Memo: Assume that new fence installation work will be performed in late FY 2002 or early FY 2003 prior to revegetation work.</i>										
	FENCE	U.C. per LF			0	0	4.2	0	0	4.2
	Purchase New 6' High 9 Gauge Chainlink Fence Fabric	370.00	0		\$0	\$0	\$1,554	\$0	\$0	\$1,554
Subtotal					\$17,505	\$7,331	\$11,264	\$0	\$0	\$36,100
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$4,538	\$1,910	\$2,935	\$0	\$0	\$9,383
Subtotal Estimate										\$45,483
Escalation					\$463	\$194	\$298	\$0	\$0	\$955
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total 9102.4 INSTALL NEW PERIMETER FENCE			508		\$22,506	\$9,435	\$14,497	\$0	\$0	\$46,439
9102.5.01 PREPARE & SEED DRAINFIELD COVER										
	LAND	U.C. per EA			0	0	0	600	0	600
	Soil Analysis	1.00	0		\$0	\$0	\$0	\$600	\$0	\$600
<i>Memo: Assume 8 hours at \$75/hour for labor & equipment to take samples, test, & make report.</i>										
	LAND	U.C. per DAY	10	CN-EQMD	347.5	0	0	0	0	347.5
	Operator for Farm Tractor	2.00	20	\$34.75	\$695	\$0	\$0	\$0	\$0	\$695
	LAND	U.C. per DAY	10	CN-LABR	315.8	0	0	0	0	315.8
	Laborer Support	2.00	20	\$31.58	\$632	\$0	\$0	\$0	\$0	\$632
	LAND	U.C. per DAY	2.00		0	300	0	0	0	300
	Farm Tractor	2.00	0		\$0	\$600	\$0	\$0	\$0	\$600
	LAND	U.C. per DAY	2.00		0	80	0	0	0	80
	Disk	2.00	0		\$0	\$160	\$0	\$0	\$0	\$160
	LAND	U.C. per DAY	2.00		0	40	0	0	0	40
	Harrow	2.00	0		\$0	\$80	\$0	\$0	\$0	\$80
	LAND	U.C. per DAY	2.00		0	125	0	0	0	125
	Fertilizer Spreader	2.00	0		\$0	\$250	\$0	\$0	\$0	\$250
	LAND	U.C. per DAY	2.00		0	125	0	0	0	125
	Grain Drill	2.00	0		\$0	\$250	\$0	\$0	\$0	\$250
	GEN	U.C. per DAY	10	CN-EQMD	347.5	386	0	0	0	733.5
	4,000 Gallon Water Truck with Operator for Dust Control	2.00	20	\$34.75	\$695	\$772	\$0	\$0	\$0	\$1,467
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.</i>										
	LAND	U.C. per ACRE	10.00		0	0	180	0	0	180
	Purchase Seed	10.00	0		\$0	\$0	\$1,800	\$0	\$0	\$1,800
<i>Memo: \$180/acre includes sales tax and delivery per a quotation from Idaho Grimm Growers in Blackfoot 3/20/02.</i>										

Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Egg	Matl	S/C	Other	TOTAL
1102.5.01 PREPARE & SEED DRAINFIELD COVER										
	LAND	U.C. per ACRE								
Purchase Fertilizer		10.00	0		\$0	\$0	\$250	\$0	\$0	\$250
Memo: Assume 100 lbs. per acre of 11-52 monoammonium phosphate.										
Subtotal					\$2,022	\$2,112	\$2,050	\$800	\$0	\$6,784
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$478	\$496	\$534	\$156	\$0	\$1,664
Subtotal Estimate										\$8,447
Escalation					\$52	\$55	\$54	\$16	\$0	\$177
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
1102.5.01 PREPARE & SEED DRAINFIELD COVER			60		\$2,552	\$2,662	\$2,638	\$772	\$0	\$8,625
1102.5.02 PLACE GFF WOOD CHIP MULCH AT DRAINFIELD COVER										
Memo: 157 tons = 314,000 lbs. total for 10 acres. Assume 20 pcf = 15,700 cf or 581 cy. Assume that a sufficient quantity of chips are available at the CFA landfill at no cost to the subcontractor and that the subcontractor is allowed access for loading the chips into dump trucks. Assume that any dust control required at the landfill will be performed by landfill personnel at no cost to the subcontractor.										
	LAND	U.C. per DAY								
Load Wood Chip Mulch into Dump Trucks with Loader		1.00	10	CN-EQHV	354.9	505	0	0	0	859.9
Memo: Assume that 2 each 12 cy dump trucks can haul 2-1/2 loads/hour each to the drainfield, including loading & unloading time. This equates to 60 cy/hour or 9.7 hours (say 10) or 1 day to load & haul 581 cy of mulch. \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator for a Cat 950 4 cy front end loader. Source: Rental Rate Blue Book.					\$355	\$505	\$0	\$0	\$0	\$860
	LAND	U.C. per DAY								
Haul Wood Chip Mulch to Drainfield in Dump Trucks (2 Each)		1.00	20	CN-TRHV	669.8	748	0	0	0	1417.6
Memo: \$17.52/hour rental costs for a 12 cy dump truck plus \$19.90/hour operating costs = \$37.42/hour or \$374/day/truck (\$748/day for 2 trucks) excluding driver. Source: Rental Rate Blue Book.					\$670	\$748	\$0	\$0	\$0	\$1,418
	LAND	U.C. per DAY								
Load Wood Chip Mulch into Manure Spreader with Loader		3.20	32	CN-EQHV	354.9	505	0	0	0	859.9
Memo: 581 cy total. Assume that a 6 cy spreader can be loaded in 5 minutes & unloaded in 15 minutes. This equates to 18 cy/hour or 32 hours (3.2 days) total for loading & spreading. \$31.66/hour rental costs plus \$18.80/hour operating costs = \$50.46/hour or \$505/day excluding operator for a Cat 950 4 cy front end loader. Source: Rental Rate Blue Book.					\$1,136	\$1,616	\$0	\$0	\$0	\$2,752
	LAND	U.C. per DAY								
Spread Wood Chip Mulch onto Drainfield with Manure Spreader		3.20	32	CN-EQMD	347.5	450	0	0	0	797.5
Memo: Farm tractor & manure loader at \$45/hour or \$450/day excluding operator.					\$1,112	\$1,440	\$0	\$0	\$0	\$2,552
	GEN	U.C. per DAY								
4,000 Gallon Water Truck with Operator for Dust Control at Drainfield		4.20	42	CN-EQMD	347.5	386	0	0	0	733.5
Memo: Required 1 day during mulch hauling operations & 3.2 days during spreading operations. \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.					\$1,460	\$1,621	\$0	\$0	\$0	\$3,081
	LAND	U.C. per DAY								
Laborer Support During Mulch Hauling Operations (2 Each)		1.00	20	CN-LABR	631.6	0	0	0	0	631.6
Memo: 1 laborer at landfill & 1 laborer at drainfield for staging trucks, traffic control, etc.					\$632	\$0	\$0	\$0	\$0	\$632

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.5.02 PLACE GFE WOOD CHIP MULCH AT DRAINFIELD COVER										
Memo: 157 tons = 314,000 lbs. total for 10 acres. Assume 20 pcf = 15,700 cf or 581 cy. Assume that a sufficient quantity of chips are available at the CFA landfill at no cost to the subcontractor and that the subcontractor is allowed access for loading the chips into dump trucks. Assume that any dust control required at the landfill will be performed by landfill personnel at no cost to the subcontractor.										
	LAND	U.C. per DAY								
Laborer Support During Mulch Spreading Operations		3.20	32	CN-LABR	\$31.58	\$1,011	\$0	\$0	\$0	\$1,011
Memo: 1 laborer at drainfield to assist with loading spreader, traffic control, etc.										
Subtotal						\$6,374	\$5,930	\$0	\$0	\$12,304
Sales Tax						\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads						\$1,557	\$1,430	\$0	\$0	\$2,988
Subtotal Estimate										\$15,292
Escalation						\$167	\$155	\$0	\$0	\$321
Contingency						\$0	\$0	\$0	\$0	\$0
— Total 9102.5.02 PLACE GFE WOOD CHIP MULCH AT DRAINFIELD COVER			188			\$8,098	\$7,515	\$0	\$0	\$15,613
9102.5.03 PREPARE & SEED SPREADING AREA A										
Memo: Assume 3 acres are disturbed. No mulching is required.										
	LAND	U.C. per EA				0	0	0	600	600
Soil Analysis		1.00	0			\$0	\$0	\$0	\$600	\$600
Memo: Assume 8 hours at \$75/hour for labor & equipment to take samples, test, & make report.										
	LAND	U.C. per DAY								
Operator for Farm Tractor		1.50	15	CN-EQMD	\$34.75	\$521	\$0	\$0	\$0	\$521
	LAND	U.C. per DAY								
Laborer Support		1.50	15	CN-LABR	\$31.58	\$474	\$0	\$0	\$0	\$474
	LAND	U.C. per DAY								
Farm Tractor		1.50	0			\$0	\$300	\$0	\$0	\$300
	LAND	U.C. per DAY								
Disk		1.50	0			\$0	\$80	\$0	\$0	\$80
	LAND	U.C. per DAY								
Harrow		1.50	0			\$0	\$40	\$0	\$0	\$40
	LAND	U.C. per DAY								
Fertilizer Spreader		1.50	0			\$0	\$125	\$0	\$0	\$125
	LAND	U.C. per DAY								
Grain Drill		1.50	0			\$0	\$125	\$0	\$0	\$125
	GEN	U.C. per DAY								
4,000 Gallon Water Truck with Operator for Dust Control		1.50	15	CN-EQMD	\$34.75	\$521	\$386	\$0	\$0	\$733.5
Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.										

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
-- 9102.5.03 PREPARE & SEED SPREADING AREA A										
<i>Memo: Assume 3 acres are disturbed. No mulching is required.</i>										
	LAND	U.C. per ACRE			0	0	190	0	0	190
Purchase Seed		3.00	0		\$0	\$0	\$570	\$0	\$0	\$570
<i>Memo: \$190/acre includes sales tax and delivery per a quotation from Idaho Grimm Growers in Blackfoot 3/20/02.</i>										
	LAND	U.C. per ACRE			0	0	25	0	0	25
Purchase Fertilizer		3.00	0		\$0	\$0	\$75	\$0	\$0	\$75
<i>Memo: Assume 100 lbs. per acre of 11-52 monoammonium phosphate.</i>										
Subtotal					\$1,516	\$1,584	\$845	\$600	\$0	\$4,345
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$358	\$372	\$168	\$156	\$0	\$1,054
Subtotal Estimate										\$5,399
Escalation					\$39	\$41	\$17	\$16	\$0	\$113
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
-- Total 9102.5.03 PREPARE & SEED SPREADING AREA A			45		\$1,914	\$1,997	\$830	\$772	\$0	\$5,513
-- 9102.5.04 PREPARE & SEED LINCOLN BLVD. PIT										
<i>Memo: Assume 3 acres are disturbed. No mulching is required.</i>										
	LAND	U.C. per EA			0	0	0	600	0	600
Soil Analysis		1.00	0		\$0	\$0	\$0	\$600	\$0	\$600
<i>Memo: Assume 8 hours at \$75/hour for labor & equipment to take samples, test, & make report.</i>										
	LAND	U.C. per DAY			347.5	0	0	0	0	347.5
Operator for Farm Tractor		1.50	15	CN-EQMD \$34.75	\$521	\$0	\$0	\$0	\$0	\$521
	LAND	U.C. per DAY			315.8	0	0	0	0	315.8
Laborer Support		1.50	15	CN-LABR \$31.58	\$474	\$0	\$0	\$0	\$0	\$474
	LAND	U.C. per DAY			0	300	0	0	0	300
Farm Tractor		1.50	0		\$0	\$450	\$0	\$0	\$0	\$450
	LAND	U.C. per DAY			0	80	0	0	0	80
Disk		1.50	0		\$0	\$120	\$0	\$0	\$0	\$120
	LAND	U.C. per DAY			0	40	0	0	0	40
Harrow		1.50	0		\$0	\$60	\$0	\$0	\$0	\$60
	LAND	U.C. per DAY			0	125	0	0	0	125
Fertilizer Spreader		1.50	0		\$0	\$188	\$0	\$0	\$0	\$188
	LAND	U.C. per DAY			0	125	0	0	0	125
Grain Drill		1.50	0		\$0	\$188	\$0	\$0	\$0	\$188
	GEN	U.C. per DAY			347.5	386	0	0	0	733.5
4,000 Gallon Water Truck with Operator for Dust Control		1.50	15	CN-EQMD \$34.75	\$521	\$579	\$0	\$0	\$0	\$1,100
<i>Memo: \$21.24/hour rental costs plus \$17.35/hour operating costs = \$38.59/hour or \$386/day excluding operator. Source: Rental Rate Blue Book.</i>										

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Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.5.04 PREPARE & SEED LINCOLN BLVD. PIT										
<i>Memo: Assume 3 acres are disturbed. No mulching is required.</i>										
	LAND	U.C. per ACRE								
Purchase Seed		3.00	0		0	0	180	0	0	180
<i>Memo: \$180/acre includes sales tax and delivery per a quotation from Idaho Grimm Growers in Blackfoot 3/20/02.</i>					\$0	\$0	\$540	\$0	\$0	\$540
	LAND	U.C. per ACRE								
Purchase Fertilizer		3.00	0		0	0	25	0	0	25
<i>Memo: Assume 100 lbs. per acre of 11-52 monoammonium phosphate.</i>					\$0	\$0	\$75	\$0	\$0	\$75
Subtotal					\$1,516	\$1,584	\$615	\$600	\$0	\$4,315
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$358	\$372	\$180	\$156	\$0	\$1,046
Subtotal Estimate										\$5,362
Escalation					\$39	\$41	\$16	\$16	\$0	\$113
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9102.5.04 PREPARE & SEED LINCOLN BLVD. PIT			45		\$1,914	\$1,997	\$792	\$772	\$0	\$5,474
9116.1 INSTALL NEW FENCE GROUNDING										
	ELEC	U.C. per EA	1	CN-ELEC	35.89	0	25.5	0	0	61.39
5/8" x 10'-0" Copper Clad Ground Rods		5.00	5	\$35.89	\$179	\$0	\$128	\$0	\$0	\$307
	ELEC	U.C. per EA	0.5	CN-ELEC	17.945	0	26.5	0	0	44.445
Ground Rod Clamps		39.00	20	\$35.89	\$700	\$0	\$1,034	\$0	\$0	\$1,733
	ELEC	U.C. per EA	0.5	CN-ELEC	17.945	0	15	0	0	32.945
1/2" x 1" Flexible Ground Straps		8.00	4	\$35.89	\$144	\$0	\$120	\$0	\$0	\$264
	ELEC	U.C. per LF	0.01	CN-ELEC	0.359	0	0.7	0	0	1.059
2/0 Ground Wire		650.00	7	\$35.89	\$233	\$0	\$455	\$0	\$0	\$688
<i>Memo: 70 LF plus 20%.</i>										
	ELEC	U.C. per EA	0.25	CN-ELEC	8.972	0	2.8	0	0	11.772
2/0 Bare Risers (4'-0" each)		31.00	8	\$35.89	\$278	\$0	\$87	\$0	\$0	\$365
	ELEC	U.C. per EA	1	CN-ELEC	35.89	0	10	0	0	45.89
2/0 to Ground Rod Cadweld		5.00	5	\$35.89	\$179	\$0	\$50	\$0	\$0	\$229
<i>Memo: 4 each ground rods to 2/0 wire, 4 each 2/0 wire to #6 wire, 6 each jumpers.</i>										
	ELEC	U.C. per EA	1	CN-ELEC	35.89	0	10	0	0	45.89
2/0 Tee Cadweld		27.00	27	\$35.89	\$969	\$0	\$270	\$0	\$0	\$1,239
<i>Memo: 4 each ground rods to 2/0 wire, 4 each 2/0 wire to #6 wire, 6 each jumpers.</i>										
	ELEC	U.C. per EA	0.33	CN-ELEC	11.844	0	8.15	0	0	19.994
2/0 Copper Kearny		18.00	6	\$35.89	\$213	\$0	\$147	\$0	\$0	\$360
	ELEC	U.C. per EA	0.33	CN-ELEC	11.844	0	1.85	0	0	13.694
#6 Copper Kearny		18.00	6	\$35.89	\$213	\$0	\$33	\$0	\$0	\$246

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9116.1 INSTALL NEW FENCE GROUNDING										
	ELEC	U.C. per EA	0.33	CN-ELEC	11.844	0	1	0	0	12.844
	#6 Ground Wire (7'-0" Section Woven in Fence)	18.00	6	\$35.89	\$213	\$0	\$18	\$0	\$0	\$231
	ELEC	U.C. per LF	0.04	CN-ELEC	1.436	0.38	0	0	0	1.816
	Trenching & Backfill	650.00	26	\$35.89	\$933	\$247	\$0	\$0	\$0	\$1,180
Memo: No funds for trenching or drilling through rock are included in the estimate.										
Subtotal					\$4,255	\$247	\$2,341	\$0	\$0	\$6,843
Sales Tax					\$0	\$0	\$117	\$0	\$0	\$117
INEEL ORG Labor/Subcontractor Overheads					\$1,360	\$79	\$785	\$0	\$0	\$2,224
Subtotal Estimate										\$9,184
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9116.1 INSTALL NEW FENCE GROUNDING			119		\$5,615	\$326	\$3,243	\$0	\$0	\$9,184
9202.1 DEMO/DISPOSE OF TELEPHONE POLES & RAILROAD TIES										
Memo: Included in the estimate per direction from the requester.										
		U.C. per EA	5	U84630	316.8	0	0	0	0	316.8
	Cut off Telephone Poles to Grade & Dispose of Poles & Railroad Ties	2.00	10	\$63.36	\$634	\$0	\$0	\$0	\$0	\$634
Memo: Assume that telephone poles & railroad ties are not hazardous material & can be excessed at CFA per direction received from A. Lundahl & D. Wagoner on 10/18/01.										
Subtotal					\$634	\$0	\$0	\$0	\$0	\$634
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$634
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9202.1 DEMO/DISPOSE OF TELEPHONE POLES & RAILROAD TIES			10		\$634	\$0	\$0	\$0	\$0	\$634
9202.2 DEMO PERIMETER FENCE & CUT OFF POSTS										
Memo: Included in the estimate per direction from the requester. Estimate of labor hours & equipment is per the construction coordinator, Jody Landis.										
U84630		U.C. per LOT	40	U84630	2534.4	0	0	0	0	2534.4
Laborer		1.00	40	\$63.36	\$2,534	\$0	\$0	\$0	\$0	\$2,534
U77630		U.C. per LOT	10	U77630	514.8	0	0	0	0	514.8
Teamster		1.00	10	\$51.48	\$515	\$0	\$0	\$0	\$0	\$515
U83630		U.C. per LOT	10	U83630	692.6	0	0	0	0	692.6
Equipment Operator		1.00	10	\$69.26	\$693	\$0	\$0	\$0	\$0	\$693
U76630		U.C. per LOT	160	U76630	8265.6	0	0	0	0	8265.6
Ironworker		1.00	160	\$51.66	\$8,266	\$0	\$0	\$0	\$0	\$8,266

Project Name:
CFA-08 STP DRAINFIELD COVER
 Project Location: **INEEL/CFA**
 Estimate Number: **3321-A**

CONSTRUCTION DETAIL ITEM REPORT

Client: **D. J. Wagoner**
 Prepared By: **R. D. Roseland**
 Estimate Type: **Title II/AFC**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
-- 9202.2 DEMO PERIMETER FENCE & CUT OFF POSTS										
<i>Memo: Included in the estimate per direction from the requester. Estimate of labor hours & equipment is per the construction coordinator, Jody Landis.</i>										
Z07630		U.C. per LOT	80	Z07630	6473.6	0	0	0	0	6473.6
Superintendent			1.00	80	\$80.92	\$6,474	\$0	\$0	\$0	\$6,474
Equipment	BWI	U.C. per LOT	1.00	0	0	40	0	0	0	40
					\$0	\$40	\$0	\$0	\$0	\$40
Subtotal					\$18,481	\$40	\$0	\$0	\$0	\$18,521
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$18,521
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
--Total 9202.2 DEMO PERIMETER FENCE & CUT OFF POSTS			300		\$18,481	\$40	\$0	\$0	\$0	\$18,521
-- 9202.3 CUT OFF WELL CASINGS & SEAL WITH BENTONITE										
<i>Memo: Included in the estimate per direction from the requester. Estimate of labor hours, equipment, & material is per the construction coordinator, Jody Landis.</i>										
U84630		U.C. per LOT	20	U84630	1267.2	0	0	0	0	1267.2
Laborer			1.00	20	\$63.36	\$1,267	\$0	\$0	\$0	\$1,267
U77630		U.C. per LOT	5	U77630	257.4	0	0	0	0	257.4
Teamster			1.00	5	\$51.48	\$257	\$0	\$0	\$0	\$257
U83630		U.C. per LOT	5	U83630	346.3	0	0	0	0	346.3
Equipment Operator			1.00	5	\$69.26	\$346	\$0	\$0	\$0	\$346
U76630		U.C. per LOT	20	U76630	1033.2	0	0	0	0	1033.2
Ironworker			1.00	20	\$51.66	\$1,033	\$0	\$0	\$0	\$1,033
Z07630		U.C. per LOT	5	Z07630	404.6	0	0	0	0	404.6
Superintendent			1.00	5	\$80.92	\$405	\$0	\$0	\$0	\$405
Material	BWI	U.C. per LOT	1.00	0	0	0	500	0	0	500
					\$0	\$0	\$500	\$0	\$0	\$500
Subtotal					\$3,309	\$0	\$500	\$0	\$0	\$3,809
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$3,809
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
--Total 9202.3 CUT OFF WELL CASINGS & SEAL WITH BENTONITE			55		\$3,309	\$0	\$500	\$0	\$0	\$3,809

Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number: 3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9210.1 INSTALL CONCRETE MONUMENTS										
<i>Memo: Included in the estimate per direction from the requester. Assume a 4' x 4' x 6" reinforced slab to support the monuments.</i>										
	U.C. per EA		14	U84630	887.04	50	3500	0	0	4437.04
Install Concrete Monuments		2.00	28	\$63.36	\$1,774	\$100	\$7,000	\$0	\$0	\$8,874
Subtotal					\$1,774	\$100	\$7,000	\$0	\$0	\$8,874
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$8,874
Escalation					\$37	\$2	\$147	\$0	\$0	\$186
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9210.1 INSTALL CONCRETE MONUMENTS			28		\$1,811	\$102	\$7,147	\$0	\$0	\$9,060
9210.2 INSTALL INSTITUTIONAL CONTROLS SIGNS										
<i>Memo: Included in the estimate per direction from the requester.</i>										
	U.C. per EA		1	U81630	68.66	0	50	0	0	118.66
Install Institutional Controls Signs at Gates		4.00	4	\$68.66	\$275	\$0	\$200	\$0	\$0	\$475
Subtotal					\$275	\$0	\$200	\$0	\$0	\$475
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$475
Escalation					\$6	\$0	\$4	\$0	\$0	\$10
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9210.2 INSTALL INSTITUTIONAL CONTROLS SIGNS			4		\$280	\$0	\$204	\$0	\$0	\$485
9300.1 TRAINING										
<i>Memo: Included in the estimate per direction from the requester.</i>										
	U.C. per EA		30	CN-SKWK	1035.6	0	0	0	0	1035.6
Training Allowance - General Contractor & Truckers		10.00	300	\$34.52	\$10,356	\$0	\$0	\$0	\$0	\$10,356
	U.C. per EA		30	CN-SKWK	1035.6	0	0	0	0	1035.6
Training Allowance - Fencing Subcontractor		3.00	90	\$34.52	\$3,107	\$0	\$0	\$0	\$0	\$3,107
	U.C. per EA		30	CN-SKWK	1035.6	0	0	0	0	1035.6
Training Allowance - Landscaping Subcontractor		3.00	90	\$34.52	\$3,107	\$0	\$0	\$0	\$0	\$3,107

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Project Name:
CFA-08 STP DRAINFIELD COVER
Project Location: INEEL/CFA
Estimate Number:3321-A

CONSTRUCTION DETAIL ITEM REPORT

Client: D. J. Wagoner
Prepared By: R. D. Roseland
Estimate Type: Title II/AFC

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9300.1 TRAINING										
<i>Memo: Included in the estimate per direction from the requester.</i>										
		U.C. per EA								
Training Allowance - Electrical Subcontractor		2.00	30 60	CN-ELEC \$35.89	1076.7 \$2,153	0 \$0	0 \$0	0 \$0	0 \$0	1076.7 \$2,153
Subtotal					\$18,723	\$0	\$0	\$0	\$0	\$18,723
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$18,723
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total 9300.1 TRAINING			540		\$18,723	\$0	\$0	\$0	\$0	\$18,723
GAPIF BBWI PF AND G&A										
<i>Memo: This is a model that works with the macro named "INEELRollup_WholeProject_outyear_revised_10-24-01.BAS".</i>										
PF	NOGAPIF	U.C. per \$				0	0	0	1	1
Procurement Fee %		50,118.00	0		\$0	\$0	\$0	\$0	\$50,118	\$50,118
G&A	NOGAPIF	U.C. per \$			0	0	0	0	1	1
G&A Fee %		18,544.00	0		\$0	\$0	\$0	\$0	\$18,544	\$18,544
Subtotal					\$0	\$0	\$0	\$0	\$68,662	\$68,662
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$68,662
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total GAPIF BBWI PF AND G&A			0		\$0	\$0	\$0	\$0	\$68,662	\$68,662
Subtotal	CFA-08 STP DRAINFIELD COVER				\$436,071	\$402,238	\$322,926	\$26,150	\$68,662	\$1,256,048
Sales Tax					\$0	\$0	\$117	\$0	\$0	\$117
INEEL ORG Labor/Subcontractor Overheads					\$59,966	\$55,837	\$19,638	\$5,322	\$0	\$140,763
Subtotal Estimate										\$1,396,928
Escalation					\$981	\$615	\$537	\$48	\$0	\$2,180
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
Total CFA-08 STP DRAINFIELD COVER			12,375		\$497,018	\$458,690	\$343,218	\$31,520	\$68,662	\$1,399,108

CFA-08 STP DRAINFIELD COVER
 Title II/AFC
 R. D. Roseland
 B. O. Reyes

CONTRACTOR DISTRIBUTION REPORT Reported From: CFA-08 STP DRAINFIELD COVER

CONTRACTOR	MARK-UP PERCENT	LABOR HOURS	LABOR	MATERIAL	EQUIPMENT	OTHERS	SUBTOTAL	% MARKUP	% DIRECT COST	% TOTAL COST
PRIME CONTRACTOR										
DIRECT COST			\$70,985	\$7,200	\$100	\$0	\$78,285			
TOTAL FOR PRIME CONTRACTOR		1,817	\$70,985	\$7,200	\$100	\$0	\$78,285		6.23%	5.60%
BWI General Markup - BWI										
DIRECT COST			\$0	\$500	\$40	\$0	\$540			
	%		\$0	\$0	\$0	\$0	\$0	0.00%		
TOTAL FOR BWI General Markup - BWI		0	\$0	\$500	\$40	\$0	\$540		0.04%	0.04%
ELECTRICAL CONTRACTOR - ELEC										
DIRECT COST			\$5,855	\$2,458	\$807	\$1,800	\$10,720			
BOND	2.00%		\$117	\$49	\$12	\$36	\$214	2.00%		
SUBTIER HANDLING	5.00%		\$299	\$125	\$31	\$92	\$547	5.10%		
PROFIT	10.00%		\$627	\$263	\$65	\$193	\$1,148	10.71%		
OVERHEAD	12.00%		\$828	\$347	\$86	\$254	\$1,516	14.14%		
TOTAL FOR ELECTRICAL CONTRACTOR - ELEC		159	\$7,726	\$3,243	\$801	\$2,375	\$14,145	31.95%	0.85%	0.77%
FENCING CONTRACTOR - FENCE										
DIRECT COST			\$24,858	\$11,284	\$9,612	\$0	\$45,535			
BOND	2.00%		\$493	\$225	\$192	\$0	\$911	2.00%		
SUBTIER HANDLING	5.00%		\$1,258	\$574	\$490	\$0	\$2,322	5.10%		
PROFIT	10.00%		\$2,641	\$1,206	\$1,029	\$0	\$4,877	10.71%		
OVERHEAD	7.00%		\$2,034	\$929	\$793	\$0	\$3,755	8.25%		
TOTAL FOR FENCING CONTRACTOR - FENCE		699	\$31,084	\$14,199	\$12,117	\$0	\$57,400	26.06%	3.62%	3.25%
GENERAL CONTRACTOR - GEN										
DIRECT COST			\$227,578	\$1,000	\$221,295	\$22,550	\$472,423			
BOND	2.00%		\$4,552	\$20	\$4,426	\$451	\$9,448	2.00%		
PROFIT	8.00%		\$18,570	\$82	\$18,058	\$1,840	\$38,550	8.16%		

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Success Estimating and Cost Management System

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CFA-08 STP DRAINFIELD COVER
 Title II/AFC
 R. D. Roseland
 B. O. Reyes

CONTRACTOR DISTRIBUTION REPORT Reported From: CFA-08 STP DRAINFIELD COVER

CONTRACTOR	MARK-UP PERCENT	LABOR HOURS	LABOR	MATERIAL	EQUIPMENT	OTHERS	SUBTOTAL	% MARKUP	% DIRECT COST	% TOTAL COST
GENERAL CONTRACTOR - GEN										
DIRECT COST			\$227,578	\$1,000	\$221,295	\$22,550	\$472,423			
OVERHEAD	8.00%		\$20,056	\$88	\$19,502	\$1,987	\$41,634	8.81%		
TOTAL FOR GENERAL CONTRACTOR - GEN		6,526	\$270,756	\$1,190	\$263,281	\$26,828	\$562,055	18.97%	37.61%	33.77%
LANDSCAPING CONTRACTOR - LAND										
DIRECT COST			\$14,923	\$3,310	\$12,459	\$1,800	\$32,492			
BOND	2.00%		\$298	\$68	\$249	\$36	\$650	2.00%		
SUBTIER HANDLING	5.00%		\$761	\$169	\$635	\$92	\$1,657	5.10%		
PROFIT	10.00%		\$1,598	\$355	\$1,334	\$193	\$3,480	10.71%		
OVERHEAD	7.00%		\$1,231	\$273	\$1,027	\$148	\$2,680	8.25%		
TOTAL FOR LANDSCAPING CONTRACTOR - LAND		424	\$18,812	\$4,172	\$15,705	\$2,269	\$40,959	26.06%	2.59%	2.32%
Non-Org PF, G&A, and PIF - NOGAPIF										
DIRECT COST			\$0	\$0	\$0	\$68,662	\$68,662			
	%		\$0	\$0	\$0	\$0	\$0	0.00%		
TOTAL FOR Non-Org PF, G&A, and PIF - NOG		0	\$0	\$0	\$0	\$68,662	\$68,662		5.47%	4.91%
Pea Gravel & Cobble Suppliers - ROCK										
DIRECT COST			\$0	\$297,311	\$0	\$0	\$297,311			
SUBTIER HANDLING	5.00%		\$0	\$14,866	\$0	\$0	\$14,866	5.00%		
TOTAL FOR Pea Gravel & Cobble Suppliers		0	\$0	\$312,177	\$0	\$0	\$312,177	5.00%	23.67%	21.25%
Trucking Subcontractor - TRUCK										
DIRECT COST			\$92,070	\$0	\$158,125	\$0	\$250,195			
SUBTIER HANDLING	5.00%		\$4,604	\$0	\$7,906	\$0	\$12,510	5.00%		
TOTAL FOR Trucking Subcontractor - TRUCK		2,750	\$96,674	\$0	\$166,031	\$0	\$262,705	5.00%	19.92%	17.88%

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CFA-08 STP DRAINFIELD COVER
 Title II/AFC
 R. D. Roseland
 B. O. Reyes

CONTRACTOR DISTRIBUTION REPORT Reported From: CFA-08 STP DRAINFIELD COVER

CONTRACTOR	MARK-UP PERCENT	LABOR HOURS	LABOR	MATERIAL	EQUIPMENT	OTHERS	SUBTOTAL	% MARKUP	% DIRECT COST	% TOTAL COST
TOTAL DIRECT COST		12,378	\$436,071	\$323,043	\$402,238	\$94,812	\$1,256,165		100.00%	
TOTAL SUBCONTRACTOR MARKUPS			\$59,988	\$19,838	\$55,837	\$5,322	\$140,763			10.06%
TOTAL COST TO PRIME			\$496,037	\$342,881	\$458,075	\$100,134	\$1,396,928			
PRIME CONTRACTOR MARKUP	0.16%		\$981	\$537	\$815	\$48	\$2,180			0.16%
TOTAL PROJECT COST			\$497,018	\$343,662	\$458,123	\$100,182	\$1,399,108			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	2001 2002 2003											
					O	N	D	J	F	M	A	M	J	J	A	S
WAG-4 Cap Installation/CFA-10 Remedial Action																
D33802	FY 2002 WAG-4 MANAGEMENT	158	18FEB02*	30SEP02	FY 2002 WAG-4 MANAGEMENT											
D33810	DEVELOP WORK CONTROL (WP, D-B DETERM, SWPs, ETC)	30	04MAR02*	23APR02	DEVELOP WORK CONTROL (WP, D-B DETERM, SWPs, ETC)											
D33809	PREPARE RFP, RECEIVE BIDS, AWARD SUBCONTRACT	41	04MAR02*	29APR02	PREPARE RFP, RECEIVE BIDS, AWARD SUBCONTRACT											
D33800	CONSTRUCTION SUPERVISION & ENGINEERING	102	01APR02*	30SEP02	CONSTRUCTION SUPERVISION & ENGINEERING											
D33801	QUALITY ASSURANCE	102	01APR02*	30SEP02	QUALITY ASSURANCE											
D33819	SEAL WELLS, DEMO FENCE & POLES	8	24APR02	07MAY02	SEAL WELLS, DEMO FENCE & POLES											
D33813	PREPARE INITIAL SUBMITTALS	10	30APR02*	13MAY02	PREPARE INITIAL SUBMITTALS											
D33814	ISSUE 14 DAY NOTIFICATION OF START OF CONST.	1	09MAY02*	09MAY02	ISSUE 14 DAY NOTIFICATION OF START OF CONST.											
D33815	REV. & APPROVE SUBMITTALS & ISSUE NTP	8	14MAY02	23MAY02	REV. & APPROVE SUBMITTALS & ISSUE NTP											
D33816	MOBILIZATION	5	30MAY02	06JUN02	MOBILIZATION											
D33845	ISMS WORK CONTROLS	79	07JUN02*	27SEP02	ISMS WORK CONTROLS											
D33823	DEMO DIST. BOXES	2	10JUN02	11JUN02	DEMO DIST. BOXES											
D33818	SURVEY BORROW PITS & BUILD RAMP AT SPREAD AREA A	4	10JUN02	13JUN02	SURVEY BORROW PITS & BUILD RAMP AT SPREAD AREA A											
D33821	TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT	4	10JUN02	13JUN02	TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT											
D33820	IND. SAFETY/HEALTH SUPPORT DURING CAP CONST.	16	10JUN02	08JUL02	IND. SAFETY/HEALTH SUPPORT DURING CAP CONST.											
D33822	TRANSPORT LAYER 3 - COBBLES FROM I.F.	17	10JUN02	09JUL02	TRANSPORT LAYER 3 - COBBLES FROM I.F.											
D33817	SUPERVISION & FACILITIES - GENERAL CONTRACTOR	62	10JUN02	26SEP02	SUPERVISION & FACILITIES - GENERAL CONTRACTOR											
D33824	PLACE PIT RUN IN DIST. BOXES, MOW & PROOF ROLL	4	12JUN02	18JUN02	PLACE PIT RUN IN DIST. BOXES, MOW & PROOF ROLL											
D33825	TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.	18	17JUN02	17JUL02	TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.											
D33826	PLACE LAYER 4 - PIT RUN GRAVEL	5	09JUL02	16JUL02	PLACE LAYER 4 - PIT RUN GRAVEL											
D33829	TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.	6	10JUL02	18JUL02	TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.											
D33827	DECONTAMINATE EQUIPMENT	10	17JUL02	01AUG02	DECONTAMINATE EQUIPMENT											
D33831	TRANSPORT CLAY LOAM FROM SPREADING AREA A	8	18JUL02	31JUL02	TRANSPORT CLAY LOAM FROM SPREADING AREA A											
D33828	PLACE LAYER 3 - COBBLES	6	22JUL02	30JUL02	PLACE LAYER 3 - COBBLES											
D33830	PLACE LAYER 2 - PEA GRAVEL	4	31JUL02	06AUG02	PLACE LAYER 2 - PEA GRAVEL											
D33840	DISPOSITION WASTE	33	31JUL02	16SEP02	DISPOSITION WASTE											
D33832	PLACE SILT & CLAY LOAM	27	07AUG02	24SEP02	PLACE SILT & CLAY LOAM											
D33833	CAP EARTHWORK COMPLETE	0		24SEP02	CAP EARTHWORK COMPLETE											
D33835	SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION	2	25SEP02	26SEP02	SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION											
D33421	Perform Pre-Final Inspection with the Agencies	1	01OCT02*	01OCT02	Perform Pre-Final Inspection with the Agencies											
D33481	Final Housekeeping, Ensure Proper signage	3	01OCT02	03OCT02	Final Housekeeping, Ensure Proper signage											
D33511	Finalize Vendor Data Submittals	9	01OCT02	11OCT02	Finalize Vendor Data Submittals											
D33521	Write Construction Complete Document	11	01OCT02	15OCT02	Write Construction Complete Document											
D33441	Correct any deficiencies noted in Pre-Final Insp	15	01OCT02	21OCT02	Correct any deficiencies noted in Pre-Final Insp											
D33531	Submit Prelim Dft Construction Complete Report	1	16OCT02	16OCT02	Submit Prelim Dft Construction Complete Report											
Start Date 01OCT01					4T02											
Finish Date 30SEP04					Sheet 1 of 2											
Data Date 01OCT01					Date Revision Checked Approved											
Run Date 26MAR02 14:41																
© Primavera Systems, Inc.					WAG 4 February Baseline											
					Classic Schedule Layout											

Correct any deficiencies noted in Pre-Final Insp
Submit Prelim Dft Construction Complete Report

FY 2002 WAG-4 MANAGEMENT
 DEVELOP WORK CONTROL (WP, D-B DETERM, SWPs, ETC)
 PREPARE RFP, RECEIVE BIDS, AWARD SUBCONTRACT
 CONSTRUCTION SUPERVISION & ENGINEERING
 QUALITY ASSURANCE
 SEAL WELLS, DEMO FENCE & POLES
 PREPARE INITIAL SUBMITTALS
 ISSUE 14 DAY NOTIFICATION OF START OF CONST.
 REV. & APPROVE SUBMITTALS & ISSUE NTP
 MOBILIZATION
 ISMS WORK CONTROLS
 DEMO DIST. BOXES
 SURVEY BORROW PITS & BUILD RAMP AT SPREAD AREA A
 TRANSPORT LAYER 4 - PIT RUN GRAVEL FROM CFA PIT
 IND. SAFETY/HEALTH SUPPORT DURING CAP CONST.
 TRANSPORT LAYER 3 - COBBLES FROM I.F.
 SUPERVISION & FACILITIES - GENERAL CONTRACTOR
 PLACE PIT RUN IN DIST. BOXES, MOW & PROOF ROLL
 TRANSPORT LAYER 1 - SILT LOAM FROM LINCOLN BLVD.
 PLACE LAYER 4 - PIT RUN GRAVEL
 TRANSPORT LAYER 2 - PEA GRAVEL FROM I.F.
 DECONTAMINATE EQUIPMENT
 TRANSPORT CLAY LOAM FROM SPREADING AREA A
 PLACE LAYER 3 - COBBLES
 PLACE LAYER 2 - PEA GRAVEL
 DISPOSITION WASTE
 PLACE SILT & CLAY LOAM
 CAP EARTHWORK COMPLETE
 SURVEY DRAINFIELD AFTER EARTHWORK COMPLETION
 Perform Pre-Final Inspection with the Agencies
 Final Housekeeping, Ensure Proper signage
 Finalize Vendor Data Submittals
 Write Construction Complete Document

